

<400> 8288

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agggctaaaa atgcatttca agccccagct gaaaaccaac tggagagggt gaggcaaaga 120
gagaaaagga gagaacacaa acttggtgct gggagtagag gctgccacct gctccctatg 180
gacatttgca aatgctgggtg aatgactgga ccctccagga atagtgcctt gaccttagcc 240
ccaaaatgta tccaagtgga gaacatgcag agcccactgt cccaggagaa ctccccctcc 300
caaagggtga cagaacacga agtagactgt atatgaaggc aatggacagg gcagatggag 360
tgtagcatc actctcttta ggcacttggtg taaggaatgt aggctctcca gtgagctgcc 420
tncnccaga gccctccatt ctggtcttca actgggcttg tgcctatagg gcaccccatg 480
ctgtaaccng canggaaaaa gtaaaggggg agnttcttaa caancctgag gcttnttcaa 540
aangaagggt gg 552
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<210> 8289

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8289

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aatatttgct attttcttta atgccttagt tctggagaaa ggctaaaatc tcacatatt 60
gacattaaca catttttaaa aagtgtctct caagtgtaat atttaataaa actaggtact 120
gaaaaatggt ctgaaatttt tcaagtcaat gttgttttca agtatattaa aatgctcaga 180
agaaaaaatt ctccatgggtt ataattctga tcaatctata aatgtacttt ttaaaagaga 240
gttccaacag aggtggataa taggtaagtt cctcagacac aggcatacag tctttttgaa 300
gaaatagaat gccttggttac cacaacctgg ttgatttttt ttttttaaac actgatttca 360
ggcacaatgg ctgaatccac ttctgggtca tctttctcct cctcttggtt ggtttacaag 420
agtagtgaat acttcagtta tggacagaaa gaaagacaca aactctgaaa cggagacttc 480
acttttcact acaaaggaat caaagtcact gagttctcat tggttgggggt ggaatctgct 540
gnccctgtgc caaaaatag 552
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<210> 8290

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8290

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gcaatttatg cattttattg tatatatattt ataactcaat gaaaatgtta tatcatatat   60
tacatgtaat tatatgtgca tataattata tacacataca acatatatat acacacatac  120
acacacacac atacaccctt atatatgatt atggcagcct tctacttctc caacgcattc  180
ttttttttgt ttttttgaga cagagtctct gtgtgttgcc caggcttcaa tgcaatggca  240
tgatctcagc tcaactgcaac ttttgccctc tgggttcaag tgattctccc gcctcagccc  300
cccaagtagc tgggagattg aggccgcggt gagctgattg tgccactgca ctccagcctg  360
ggatagagcg agaccttgtc tctaataaat acacaagcaa aatccaaagt tcgctttgga  420
ttgctagccc atcaaaaagg ctagctcctt gaagggtggga atttttgcca ctttagttcc  480
ctgctgcatg cccagcaact ggaacaagtg ctttgcacat agtangtgct cagtaaatgt  540
gaaggatgaa tgaanac                                     557
    
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<210> 8291

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8291

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gcaaagaagg aatgaaggga tttattgaaa atgaaagtac actccacagt gtgggggtga   60
gcctgagcat aggagcacia aagccctgtt acagaacttc tgagagttaa aataccctct  120
aggtgattcc atttggttact tggggcacac gttatgtaga tggagagcct gttacagaac  180
ttctgagagt ttaaacaccc tctaggtgat tccattgggt acttggggca cacgttatgc  240
agatggagag gatgaagtta caaagtcatt tgcttggcct atgtcctatg gagaaggtat  300
    
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ttcctatcat aactgaagtg tgaatcagcc tatgttccct gcactcagac cctatittcc 360
 tgcctcctac ctacagctgt gtggtcctga gctgtcacct cttccctttg aagctcaggt 420
 tcctcatcgg taaaatgagg cagaaatact cactgctgan atgtgtgagg atcgcacaaa 480
 ctcagtgtct caacatgttg tacntgtgtt tgggccctct gagcccttga ggcttgcccc 540
 aggtggaac 549

<210> 8292

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8292

ggaaggggag gtcataaatg ttgaatctgg caaatcataa atttcttgtc ttaacattgc 60
 cgcatttact atcatctcat ttgaaagctg atgtgtttgg gctgggtgat ggcagagggg 120
 tgggagttgg gggatgctgg ctctgaaatg ccagagaggc attaagaact ctggaagcat 180
 ctggctactg gtagacattt tacacagata gcaatttctg accaatccat ttcaatgatt 240
 tctaaccat actcaactat ccagaggata ctgttttaag aacattattg taaactgata 300
 ctctctattc atttacaaaa ttcattcatt gcatactttt tgtttaatag cttggattca 360
 gtgttacaga tttgattgac ccaagtga aaatactgac actaatcatt ttttaagtgt 420
 atttcagaag aatatgcgca atgtttctaa gttattgtga ctttgtgact gtcgtagctt 480
 taaattataa tactaatatc ctactctgag aaatgtgtaa gacacaggtc taacaaacaa 540
 ctacattaac ctcg 554

<210> 8293

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8293

gncttccata tgacactttc attccccata cttttctgtg aagaaagacg cagaggtagc 60
 aaagacaaga gacaagtaga ttgcaaaaag aaatgttttt gtagaaaagg gaaaaactct 120
 atgggagatg aaataaaatg agcaagttct gaggggtgat ggacagatca aaaacagatg 180
 atcttcaaga caacataatc acccataaac gtggtaaaac aaaaaattac acttccaatt 240
 tggtggaaag agtgccacct gctgacactt tctggaataa ggtagtttag cccatttgaa 300
 agaagctgta ttgccttctc aaaaacaacg aaaacctact attgatcaat gaaggtaaca 360
 agatataact tcaacaaagt aaaacaacga acacataatt atcccacaaa ataagaattt 420
 aaataaagaa ttatcaaacc tggaattcta ctctgtcaa ttattgnttc tggcatatgg 480
 taggggttca aaatacattt gttggagcga attctaacat agtactattt agttttctga 540
 aaatcctgna atgn 554

<210> 8294

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8294

cttttgcaat ttcttctagt ccttcaccac tctccatgcc ttctacaaaa atccccccac 60
 attggggaag aatccagtag cggcgtctgt aacgatcttg gccaaacatc actgaacgca 120
 atgagtgaga cgcatacaag agcttccttc tgtactgact ctgttgttta ctacgttttt 180
 caatctgttt ttccagctct tcaacacttg ctgcttggtc accttcatcc tcactttcac 240
 agatatcagt cttttttcct tttttgtctt ctttatcttc ttcatcctca tcactttcat 300
 ccccttggtc atcaactgtc tcgtcatcat catcgtcata atcaactgtc cctcccttcc 360
 ttcttcgctt gcgtcctgga gtgggtgtgc ccaagggatg ttgctcttct cccagatcaa 420
 tgccacctga agtgtctctt ttgcctgttt tcttagcatg aatgattctg agcttgcgga 480
 gtttaccttc taccacccat ttatctctcc tcaagttgac atataatcaa ngtettgncg 540
 attcactgac cn 552

<210> 8295

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8295

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ggtattcctt ttattataat gttttaaact tggcttaaag ttcaaaatac tatttccaga   60
taactttcca ctgttacatc aactaggcaa ctttgttatg tttatgttat atgtatcagt  120
tacttatcag cacagaatth taaccactct gctaaattht gagaaaacag ctaaactcaa  180
tataaaattht ggcctacaga attatagtgg ctatttgtha ctaaaaatat tccaaaagaa  240
atttacttat tttactatat tccatattct ttaacttaaa atctgctgcc actgtttagt  300
aaaagtggga caaataaaat tctttaaaat atagaaaata cagttcctgt taagattttg  360
caaacaaaaa attaataaat aatacaatth gagtactcta aaacaatata ctttgtagtc  420
tagattgtgg ttttggtcag tatgtctgac actatgaaga ttacatcag ttcagggaat  480
gagttctaht ctattaataa atagtcaata taaccaaaca cctgacagga ttcccatat  540
gaatatttht a                                     551

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<210> 8296

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8296

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gtttccagaa gagaaattht atctaattta catacttcta ggtacatcga taacaaaaat   60
gtggccactg aaaaaagtta aaaggtcaat cagctcctgg cttctagctg gccaggatt  120
gcaaaaataaa aagatccacg ttccttattc tctacacaaa acgcgttht aaaaaagtga  180
aaggtctagg gagctataca tagaaagcaa cagtgaagag ggagaggag caggagtggg  240
ggaggagagt cccaccccc aacccaccc tccagggcc cagagcccct gaggtcttht  300
ggggggcctt gacatggcag gaggcagctg tcagctctga gctcttcca gctgggaagg  360
cccctctcgg gggcagccaa caaggatttc cgtggcattg tgggctcagt ggggggctcc  420

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caggccccag caggccccac agagggagcg tggcttcct gagcaagcac cgtggcatga 480
 tgtggtcggt caaccagga actgggggtg cngggcaagt cccgggtctt acgaggtgcc 540
 tgtttgtgtg tggt 554

<210> 8297

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8297

cacagaaccg gagtatttta ttgcaccaag atcttggcaa cacgtggggc tccccaggcc 60
 cccggaaagg aggtgcagag gatgggacac agacctctgc acacacacag gtgcggccat 120
 gcaaccagga cgcggggcag gcaagtgaga ggacctggga gaggtagctg ctgtacacag 180
 gccccactcc ctccagctcc attcccaagc acaaaattca acagaccag atcctaagtc 240
 aaccaagtga ctgctatgac aaaggcttgg gttattgaca ttacttaca tacgtgtaca 300
 agacctagag tttgaactcg ttttctgggc ctcatcttcc ccttcctat ctggttgatg 360
 acttcggtgg aggggaaggga cgtgactcca cccaacagtg ataaacgctg cagaaagtca 420
 tctcgtgctc accactgccc aagaattaac gaatgtatgt accccaggaa aagggtttac 480
 agttatctag tggagaaggg aanaaactga tttggaggaa aagaaggag agaaaggacc 540
 cagataaatt tnn 553

<210> 8298

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8298

aataattact ctttatttaa aataaataag ccctcttact tacagggaaa atatgaaagc 60
 aaactctgtc ctcttggtct aagacagaaa ccacattcag aatatgttca ttgaaaaagg 120

aaagatttgt tgattatcaa acaaatctag gtacttcaat acacattggt tctttgaaaa 180
 ataaagactg aaaggaataa ttcatttcaa aaagtcacag gttagaaaac caattttcct 240
 tctgaggctc attttagcaa atcctccaag tgttcccaaa tcttttaaaa aagctacatc 300
 ccctgagaaa gggccctttc cctgtagccc tcttgctctg acaccagcag ccctgcaccc 360
 ttctgccaag tggctccctg caggacggtg ctgttgccgg gcaggaatgg ccctccatgg 420
 caacctccag caggcaggag ctccaccct gctttctgca aactcactca cttggctcag 480
 ctattctgca atgganagga agttccttac agccaaagta ttctaagntc acattttinca 540
 gtt 543

<210> 8299

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8299

aacttgtctg tattttctgt tattctacca caaatttctt tcaactcttt ttataaaaaat 60
 gcctgtctcc ttagttgacc tctaagtttc taggttcttt ctttttcttc ttttcttttt 120
 cttttttctt tttttgagac agagttttgc tcttgttgcc caggctgaag tgcaatggcg 180
 caacatagge tcaccacaac ctccacctcc tgggtttatg tgattctcct gcctcagcct 240
 cccaagtagc tgggattaca ggcatctgcc atcatgcctg tctaattttt tgtattttta 300
 gtaaagatag ggtttctccg tgttggtcag gctggtctca aactcccgac ctccagtgat 360
 ccgcctgcct cgacctccca aagtgctggg attacaggcc tgagccactg ctcatggcca 420
 gttctttcat tttttgagtt tctgtttctg atctaaagtt taccactggt ttccaatttg 480
 tttgtgaagc anagaatatt ggcacactta gttgcttgca taaacattcc tttcctataa 540
 gatatagn 548

<210> 8300

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8300

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aatagggat gacatttctc catgtttgtc aggccttgga ctctctacgt caggtgatcc 60
atccaccac ctcggcctcc caaagtgtg ggattacagg tgtgagccac tgcgcctgac 120
ccttgaggt acttcttaaa gctatgggg tttcccagag cttggtagca tgtgtgttca 180
aagggtatc aatgttgagt tgtcctagca ggcactggat agagagcagg atggtcctga 240
tatcatagg ggcagaccac ttctccttca ggatgtccag gcatatgtta ccctgggtgt 300
ccacgttagg gtggtagcag ggtgtgagga acttcactgt gggtgcatcg taaaggtggg 360
tagtcattga ggaactccag caagagctta tacctcagat cttcatacac tgtgccagct 420
gcttcatgga tgggtgccat ttgataaggc tttcagggtta ggcagaaatt cttttgtcac 480
caggcatcat gaggggtcat caacttctgc tgtacctttt ggctacaggg ncccaagcaa 540
tgnccctgnt gg 552

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<210> 8301

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8301

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actgtttgtt ttttnccaac agagttnccg tcttgttgcc caggctggag tgnannggca 60
tgatcttggc tcaactgcaat ctctgcctcc caggttcaag cgattctcct gcctnagcct 120
cctgagcagc tgggattaca ggcatgtgcc accacacccg gctaatttta tattttagt 180
aaagacaggg tttctccatg ttggtcaggc tggncctgaa ttcccgaact caggtgatct 240
gcccgccttg gctcccga aa gtgctgggat tacaggcatg agccaccng cccggnctac 300
tagtgtttta tctttgattc tctgtcagcc ctcacccctg gttcttgcc tttttgatca 360
acaccttttc ttgcctntgt ccccttctct cctgtatct ctcactcccc tccaacctgn 420
gggacagtgg tgtggangag gaacatagg cctganagtc catctgactc cttnctggac 480
ccanaagcan gagaaggng 499

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<210> 8302

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8302

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aaatgttcag tcttttattt aaaaactata aacagtcacc aaagtaaata aagccattct   60
ataacataaa ctgttaggtc tatatttttt actgcacatc ctaaggacac agcagaaatg  120
gtggttggga ggccttccac atttttggat gctaatagaa caggcaatag gcagttataa  180
atggatacat ttcacgctgg gggaaaaaag acaatttaag gaagtgagca gtttctgagc  240
aggaatgtgg tacagtatta agaatggaag aataatacaa taaaattcca cactatatta  300
agatagaaaa agtagtgaag aaaatatcat acctgcacat aatgcatata taacacagga  360
gaaaacctgt ataaaattcc atgtatttaa accaatttac aaatacaaaa aattctgtcc  420
aagctctgag cttgtacacg acaaacgttt acagtggata catgttaagg aaaacaaaaa  480
aataccttca aatagttttt cttcttaaaa aatgacctga gatataattat tccataactct  540
ttagccngc aaaatgaggt                                     560

```

<210> 8303

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8303

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ggcataacac aatcaggett tttttttttt ctttttcctt ttaaataataa ggcaacttgc   60
caacacataa cttaaaactg gtcttcagtc acattgcttc agatcactag agaatttctg  120
gctaacgaac agtagtggat agtgaacaaa atgcaaaacc ttaaataaga accatcagct  180
gacattcccc agagacaaga ggaaaggtaa gggcttattt catctgtaaa aaataaaaaa  240
gcccaattct gcattcttaa cagaatggtg caaaaatttg taacaaaaca gtctaagttt  300

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aaaattacag aaaagtgttt ctagccaact aattgtcgct tgggatgaga cgtgctgagc 360
 atggagtgga tgaaggtatg ctctaagaat ggacagaggg caggaggggc ttgtttccaa 420
 tgtaggccca gcttcaggtg ttagaaccat gctcatttgg taaangaagt ctcaaagagc 480
 ttaangcttt gggttggttt ttttttcctt cattaaactg aggggctgca ctaanggtga 540
 atctacctgn ggg 553

<210> 8304

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8304

atttccatga attcaaagcc ttttaatgat gtgaacactt actccccatt tcttttttac 60
 attgttacia aaaatttaca tacagttttc tgaaagtggc attttgttgg ttgttattat 120
 actgatgaca catattaaca ctttgtattg aagaagtatc ataaaaatca cagggcatta 180
 cagatttttg ataagaagta gtaatagcat tgtcttttaa cagctggagg ctcccaggca 240
 tactcttttg tgagaaatga ttaattttat attttcattt tgatgagaat cttttcttgt 300
 ttttaccagt tataaaaaca aagctttttc tttgttgtga tactgtgcac taagacttag 360
 tttcttgagc tgatgctaaa taaaatgaga tcaataggaa tattccagga ggtcgtgaga 420
 agttttttaga aaggatggca tctacatata tatggagctc tgaaaactgt tggagagtat 480
 gacctgggac tgaaactgtg gagcacatag ccaggtcaca ngcttcgana gcnnaaagag 540
 ttgctctg 548

<210> 8305

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8305

agtataataa ctttttattt gacatctaca agatitttggc atcttgcagc tttttaccag 60
 gtttatacaa tctcgatttt tcaatagtgc aacctgtgga agcaaaaaaa aaaaaaaga 120
 aaaaaagaa aaaaagaaaa gaaagaaaaa gaaagaaaag ataaaaagac caactgtccc 180
 ctcaacttggt tttataaaca tctattatag gcgaaacaaa acttaccat attatataga 240
 taagtgtcta ttcacatttg tacattacca tttttaacag cttgagataa actctacgtc 300
 ttacaacaca ttaaacaata ttcaagttac tgagtaacaa caataacaac aataacaaaa 360
 gaacacacag cagaagcctc aagtgtttcc tcattgtcta caactcaggt atggtttcct 420
 ttttatgagt gacaaagcaa attaagataa tgaagtaaaa aacgattggt tgcaagatga 480
 aagccaattt gnacttcctt ctaaaactac ctttaagttg caaatgtaaa ttttaagaagc 540
 tnatagccnt 550

<210> 8306

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8306

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 cacgggaacc gcattctctt ccattgcagc tacttggcag gtggcgggat gtccccccagc 120
 caccgacgtc cccctgcctg ctccgcaacc ccagggcctg cagaaaaggc ccacgagact 180
 cagactggca gagacttagg cggaccagga acaggggcgc agtctccgtc ccacccaaac 240
 cctaaccaga gagaacacgg cacgttgtgc cagacggagg acggatgcca gcgagggtcc 300
 atgtcctcac tgccgacaag gctgggagct gggccaagtg aagcagaggc ctncacgtca 360
 gatgtgagcg ccaccggccc aggtgactgc agttcttccc tccttccgtt cggcttgagc 420
 ccttcagagg atcggaaggg ctgaagcctg acctgggtgcc gttgtcctgg gtgggtctgt 480
 cctgctggtc ggttctgncc ttttcgggag gttggctggc acttgcangt ggaaagcttc 540
 tnggttacct nagggaaaag ngg 563

<210> 8307

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8307

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ggagagagat gtatttatac cagtggggct aaggaggaag cagtccagtg ggggactttg   60
agtgctgtgc agtgttctct taagagtcgt agtacagtcc tggggtcaag tctctttccc  120
taatctttgc tggggaagcc ttgagccttg atttatcctt cccttggcctt tgggctttga  180
ggaagttggg gatggagggg atgatgcttc tttaggtttc tctattccaa gcccctctga  240
atttctagtt gcaacctgcc ttcacacaga gttgatggga aagattagtt gtagatgtcg  300
gtatgggatt gaggctacag caagaggaag aagggaactc cagtatagag tacacaaagg  360
aaaagggcag gaaagatacc aaaggcttat gaaaacaaag gaagggaaga aaagagaaaa  420
aaggtggaaa atcaggtccc agattgcttg ttaggaagaa tgaggtaatt ttgggcctag  480
gaatgcacaa tccaaagctt gattttcacc acctncattg gtctcttcga gccttccttc  540
caaangttct tcccggctta aagccagcan                                     570

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<210> 8308

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8308

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cttgtcccat gggcacataa tttagaatac atgctctcaa atgacaaaac atcaaagggtg   60
agaggaggga ccaacaatga acatgatctt ttttaaaagg gggtaacaga aatagtaatc  120
ttttataatt ataaatcctc tgcataccat aaaatgattt ggtttagctt tcaaacaatca  180
tctaaacaaa caaacaagac agagagggaa gttcactgct ggggtttgca aagaagggca  240
tctgttcgtg ggcagatgct gcagggtggc tgctgaaaag ctccttttat gtgcatgatg  300
gtggtcttct cggctacagt acaagtgctt gtgcatcaag tataaaatac aagcctttta  360
tcacatagat cagcttttta gcttttgtaa atttaaaaac aaaaaggata aataaggcac  420

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tgtactttta aaaacgaaaa ctgcttggtt ccaagtttaa aaccaagga caccagaata 480
 taatatataa cticcttacc tcagagaagg actctgcaag gttccttttc atctgagaag 540
 catttctggc atctaa 556

<210> 8309

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8309

ctgtggatat tttaaaagtt tatttctatt ttaactagcc cacagacccc attctttgag 60
 ggctgatctg atttctgaca aatggtctat agaccctcct ctcggaact tccaaaaaag 120
 tctgcacctt ccatcatgat gcacatttta agttaaaatt gccaatataa cccttaaaat 180
 gcaagtttat tgaataaagc tgagaagagc agtaaacaga caaaaaatgc atccacctaa 240
 ataaaaaaat tcacatattt acatagtcca gtaactgtta aaagttttca catgcagagg 300
 ttaatgcaca ggaaaatggt ggtaatagcg tctggatgtc ttgaaatgcg gaaagcaatg 360
 tatagacaca caaacacatt aaggtttagc tataggtcaa ttaacaaacc tatgcagtcc 420
 ccacagagtc acacattcta gttccaattc ctctttttag gcacaagcaa gttggccaca 480
 ttctttttna atgggtcaca ctggccatta anggggttga acaccgtnc aggttnaaaa 540
 tnccttcatt tccgaanc 558

<210> 8310

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8310

gtttttgagg agatgaggtc ttgctatgtt gctccagctg gtccttcact tatttaatcc 60
 taccagctag tgttctggta tctcctctga atttttaatt aatttcactt ccagagaatt 120

aagtattatt tttgttgaca gtttgttctc tcaaacggca ttgcatttag taatactttt 180
 ttagttgttg gggtttttgt tttttcaaat gttactaatt tgtttccctt tccagctgaa 240
 gaaatagtga ccaggggagt aaatattctc aggccactgt gtttgtatat tatggacaat 300
 caagaaagaa ctaggggatg ttagagacag aactccagag gtcaggtcat ctccgtctac 360
 tcacttggtg gacttggcta agtcacgtga tctctctggg cctccatttc ttcactctata 420
 aaatgggact aatactttca acctagtaca tgaaaagaaa atatgctgat tggacccatc 480
 ctacttctgg tгнаacctta caccagagcc caggctgggt ggtcatggat ggtncctgc 540

<210> 8311

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8311

agggctgaga aaatattcag tttattaaat attgtgaatg ggtggaatat cagatacatc 60
 atctcaatat gtaaatatcc tatcccatct caacatcaaa tttagattac ctggatttct 120
 tctttgcttt tctctatgat tacagcagag atcattatgt attttattag tttcttcagt 180
 ctttaaggta tttttggatg atgttcaaat aaactccaag ttatctccaa ctttttctga 240
 acaaaatatt tccattctta agatacaggc ttgtaattca catacttgat gctactcaat 300
 ggcgctctat ctgtattttc ttctcacatt tgactccaga gtattcagtg cggcaggaac 360
 acacattggg gaaatatgca tctgcctcca taaagacatt ttgggttgca aattggtatt 420
 gacaccggac tccttnccag gaggaaggac aatggcatat gctgggcccc atgcattcac 480
 caccgtttta catttctgca agcnnaaang ngtgttgcat cgttcccact ccacca 536

<210> 8312

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8312

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ctcgagacag ggtctctgtc acccaagctg gagtgcagtg acacaatcaa ggctcactgt 60
agcctcaatc ttcagggtc cagggatcct cccatctcag tctccttggg agctgggagt 120
aggcatgtgc caccatgcct ggctaatttt ttaatttttt ttagagatg gggctcttgc 180
atgttgccca tgtcgggtc aaactcctgg gctcaagcga tactcccacc ttggcttccc 240
agtattggga ttacaggtgt gagccaccat gtctggcttg cttctctttt tgtattctaa 300
aattcaaagg cctaagtatc aaatccctaa atctccaaat actgtcacag ataaagactc 360
aataataaac tccctccgaa agtttagaca ggctcagggtg agagacttgt tcaaggggtt 420
ataaaaagaa acaccagtgc tctgcagaag aatcaagttt ttaatttttt taaatgnatc 480
tattttaatg ggaataagtt gatcattaga atttgtaaac caaaanggta atttctcaag 540
ttt 543
```

<210> 8313

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8313

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ctggaaacta aagattttta tttaatccaa atgttgcact ggaagaagaa atcaacagtg 60
gtatatttac ttaacaagga tgtgtgtaat acaagacaac cctggggatt acacacttga 120
aggaatggaa gtggcaaagg ttaacaggca gaaagcagct ggatgaaaca gtttattttc 180
atcttagaag attctagcta tctgtggaga ccaccactgt tccccgaaa gctaaagttg 240
ttaagtttgt aggagtacca caggtecttc cccctgtcgc aagacagaga cttgctctgt 300
tgcccaggct gcagtgcagt ggtgcaatct cagctcactg caacctctgc ctcccgggtt 360
caagcaattc tcctgcctca gcctcccatg tagctgggat acaaggtgtg tgccaccatg 420
cctnggttaa ttttnggant tttagtanan attgngnntt ta 462
```

<210> 8314

<211> 491

<212> DNA

<213> Homo sapiens

<400> 8314

```

ctttgtccaa tgattaatat ttgatatct attgacaatc ccttagaact ttaaattctca   60
aaaacaaaaa agtactgtgg atctccatag ttatacaga attatgtgaa ttctataaac  120
ttttctgaac aaaacaatta catgtcaaga atccatgaag cctggaagat acgtcacgt   180
ttttgaggtt tgtattaatg ccagttttta ttgtattaga caaatgctct ctgagaatcg   240
aagacttcta aaggtagaca ggcccagttt cccattagag ttctggaagc agagcctggg   300
gaaggtctgt cacttgccca tcactggacc agccagaagc cagcgggggc caggcggggt   360
ctgcaggctg caggtcctt ccagtcctgt cctgctgcc ctttggggac cattttggtt   420
aanaaccttn gccggttgnc cttgaancit cnagcncct taccttaggc ctaaanggtt   480
cctgaaaccc c                                                    491

```

<210> 8315

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8315

```

ggagtaggca tgggtcaatg attgtttatt gaataaatit actactggag taagaagtgg   60
cttagagtcc agtgtaacat ggtggctggg agtgtgagt gatgaatggg gggcccgata  120
taggaactgg gccctcgggg atgaggccga gttccatcct gccttcttcc acgaccatcc  180
ttaccttccc acccccaccg ctcccattct gcagatgaga aaaccgaggc tccgaaagga  240
aaaaccactg cctggattcc cacgcctctt ctttaactca tttgcagggt agggcaggga  300
aggaaaatcc tagggtcagc attggggagg gggggactct cctaaattta ttgggcaaca  360
ggctgcaggt ganggggctg acaggaagaa gggtcgggg tgtnaataac cttaaaaacc  420
gtaggtgaca acnggaagtt ctttaagaan accnttgccn aagggaagg ttttgggggg  480
ttttccaagg gttttgccaa aaggncctcg gccaaacctt gggccagaaa atgggggttt  540

```

tannccttan gggnt

555

<210> 8316

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8316

```

aaagatagag ttttgctttt gttgctcang ctggagtgca gtggcacaat cttggctcac   60
tgcaacctct gcctcccagg ttcaagtgat tctcctgcct cancctcctg agtacctggg  120
attataggca tgcgccacct tgtccggcta attttgtatt tttagtatag acgggggactc  180
aaactcccga cctcaactca tccgcccgcc tnggcctncc aaagtgctgg gattacaggc  240
gggagccacc gcgccgggcc atcttagatc ttagagccca ctttagtcct tgaaatacat  300
ctgagaagcc aatggcagcg aatgacggtg cccgcctgcc ccaggcacct tgggtgggcc  360
aggccctgct tcaggagggtg gcggccactt cngggatnac tgatgcagcc ccnaccceca  420
tggtttgtcg ggactaanct gngtcttnaa ggtntgtgaa acttcca                    467
    
```

<210> 8317

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8317

```

caggtaaaac cacattgcct ttatttggct aaagaacaaa atccaaaata actcagaaca   60
aactaagaac agacaggaaa attacagact gaacccccact tgaggaagac ttccccacgg  120
actcacactg gtgatggggc gaacgttcaa gacgaagcca gcagtccttt ccaagactct  180
tttgtctttt agggatcctc aatacaaaac aaccctaata atccaggata tgtgttcaaa  240
acagtcagtt ttccccctca aaaggcggga aggcccactt caaacctcca ggaacacaac  300
ccaagtcatc ccagtgttaa acctgggtgct tccgttttct gcctcaatcc gagcgctaac  360
    
```

ataaaatctt ggcagacaac aatctttctt tttcaagaaa attaacattt aatgggataa 420
tcccaagaac atggtctact taatttgctt tggaaaattn aaacttnggg nccctntttn 480
ttcccaaggg cngtnttttt ttttgagaa 509

<210> 8318

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8318

aactttacaa aatttgtttt atatctgtta gaaaatgtac agacataagt attttcagtt 60
gacaaagcat caaaccaggt tctgcctagt gataagtttc accctagagt atgtatgtaa 120
cgtttttagct tatccatcct ttcttgagac gcctccattt ccattgaaag ccaggctgga 180
gcaggaccct tttggagtag tgactcagtt gcttccaaag cccctgctat tgtatgcagc 240
gctgacctgt actcttcttc ccaggggaac tcttgacgag ctctttttgc ataaggctgt 300
aaagatgacc tctttgcttc ttctacagtc acattagcaa agggttccca gaaaatacct 360
ttttcctggt tcacacgttc cactttggca agcttcagtt tcatctacaa acccagcttt 420
ntccagaang ggtccacttt ggtccttaag tttttttana acttgggaca cnttgggaac 480
cttttcttta agaanttggg ccntaaggg aatctggn 518

<210> 8319

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8319

aaatttaaaa agatgtcctc actgcacaag tgactacggg ctacaggcaa ggatgggaga 60
cggaggcttc aacacaactc attgcactta gaaccgttac taaccgaaac accatttgct 120
tgtcaacaat gtacccttga cagcaggag aaacttcttt atagtctctg cttcagacaa 180

gatttacagc tttctccaag gccagaggcc aattgtgacc acaagtcttg tttcttgtcc 240
 accagaccca atcctctggc accttgtagc ccccgttcct cagcaatatg ctcggcctag 300
 gttccagagg cagctggaag gaagcagcta tgggctcatt cagttctgtt tgcccaaadc 360
 cagaagccct aggaaagtcc cgtctgagtc ttgactcctg gacccttcaa tggcttgaag 420
 tccggtactt gggcacaacc ccaatttcac cgggggtgggg aangctttga aattggaaac 480
 cncnnatanc cctggaggcc ttggnaaaaa ntt 513

<210> 8320

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8320

gttcagagta gctttatfff aatagccaaa tattggaagt gatccaaatg tccatcgaca 60
 ggtgaatgga ttaaacaacac tgtacagatg tggtatatcc atacaatgga atgttattca 120
 tcaataaaaa gaaaagaatt gacacacaca agacacaaga atctaaaaaa taattatgct 180
 gcgtgaaaga agacagacaa aagaagagca cgtactctat gattccattt atataaaact 240
 taagaaaatg caaacgaatc tgcagggaca gaaagcagtt cagtggctgc cagagagagg 300
 gttttctcag ggggaagagg cctaagaaaa cttttgtggg tgatggatat gatccccctg 360
 ttgattgtgg tgacagtffc acagatgtaa acatatggca aaacttatca aattatccac 420
 tttaaataat aaccctgtgt tggatatcaa ttttacctta atnngnctn gttttaaaaa 480
 aantttgnct cncaagctta aaaaaggn 508

<210> 8321

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8321

ccatatttca ttccatttt attacatgtt cacattattt cctgaaatca tcttagaacc 60
 ttttgttttt gcaaaatttt agagggtccag gccctgtgat agctatgtga tgttttttcc 120
 agcacataaa gcaaattcat gatgtgaaag aggcaaatga caatagttaa agtatgtctt 180
 attttgtaat aggatttttt taataaaaaa ttattgtgga acaaggtaca ttaaatttgg 240
 cttgcaatta ggaaatatgg gagccggact tgaagagcgt gtgattgagt ccccatnt 300
 aactgatgag gaaacaggct cagatgggtc tattgatggg tccacttgct agaagcaaaa 360
 ctggaactag aaaccacgcc ctggcttcta ggcagcaagc aataagtttt tgctaaattt 420
 ggtncccaac atttaaaacc aattcccaa aatngggaaa gncaaanngg gttttaantg 480
 gggntttttt 490

<210> 8322

<211> 399

<212> DNA

<213> Homo sapiens

<400> 8322

aatgaggcac ctgngggact ttattaggta aacagacccc agctccagcc acaggcttgg 60
 accggccagc tgacagtgcg gcctcanaca ccccgccag gtccctcct ccctcctntn 120
 tcagggtcac cagtgtgtga aanatcgggg catgccggcc acagggggaa gcagggttca 180
 ggctgcccc cctgggtctg gccctggcag gcgccccctn acctggctnt gctgtgggag 240
 ccgagaacaa agacatcacc tgcctggctc ctgctgcccc ggggggtcaa gccagcacc 300
 accctnacag nggcctgggc aggggctggg gtgcaaagcc tacccttccc ctgtgagcca 360
 gacngnaaat gcatttncca aaatgtntcg aggggcacn 399

<210> 8323

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8323

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gttgacacaa aatcttttta ttccccattt gccatctttt ccacaaacct ctcaggtaca   60
gatcggaaga aagtgcataa aaaccctgcc ttatttaacc aggcccaccg cctccgggac  120
agcccctggg ggagcccat cccgctaggt agaagggaag gccacaccaa gtgctgagtg  180
agccaccag acagcaggtg ctctgggagg gaggggagac aaggggtagg ggaaggcttc  240
ctggaggagg gagaggcctg gccctgagag acagggggcg gtccctgaaa agggagagag  300
aaggcacact tctccgggaa ccaggcccca gcacctgagc attggacca ggccggccagg  360
aagaacacag gccaaggcgg gggcctgaac caaatgggga ctgtggaacn tcagggaaca  420
gccnttttg gcttaaggct ngagtntaaa aggaccttct aagggttct ggttgntgg  480
ttcaaagga ttccaanggg aaaccatgcc tncctaggnc ccaccgntgg  530

```

<210> 8324

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8324

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gtttttagtg tgattgcatt tattcttata aatgtacaga gctgtagaag tgcaagccaa   60
gagttctata gagtagtaca taaacacat atggtaccac tcctgctggg aggtaagcct  120
ggatacacc ctcctctcag gaaactgtca cctgcagaac acacagcact cagaattaag  180
gcagtttggc cctgggcaca ttggtggtat tttggtatgt ggccactggc cctaaacaac  240
tgaccatttc taccctgcct cactgcactg tcccaccagg tccctccagc tttttctaca  300
aggtaacacc ctctacatg gggtcagcca gtcagaaac ctcttcttca gggacagttg  360
cagctgaata tgccagagct gattattaca acaacgatgc agagggcctt ggttttgggg  420
cctgncacce tnaccctaga actggttaac acccaagcca ntctgcctga ccaccttccc  480
aacagaagat gtaggctatc ttaccttcac agcancttcc angacaaaac tngggccttt  540
acctgggtgn tggct  555

```

<210> 8325

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8325

```

aaaaagtga acttcaaata cagcggaggt ggcttcttct ctatgaggct ggctgatggg 60
tgccagatac caaggcccat gtgttactga ggagacagcc tgctgggctg gggtcaggag 120
ctagcggagg gaaacgggta gatctcagaa aaatctcatc actatgccct agtagcttaa 180
tgacatcact agcatgagca catggtgtac ttggcgggat cttacagctc tgttgcccat 240
ctcaagacct aagaacaatt attaagttta gccaaatctt gcatagacgt ggtagaatt 300
tattgcacat tggaacaaaa atatataatt tttgttgttt tggaaaagac cattagcaat 360
aaaaaatttt ttgtctgtct gtctggtttg gggatgtaca ttggctgaca gcatctaagt 420
tctaagaaga aagaaaaagt ntaaaaaatn aaaattaacn tgacaatggc ataagccaga 480
agccatttcc tatttaataa gtaataattt ggattttcca aaaagnatgc ccattaaata 540
aaattttttt cnggtttat 559

```

<210> 8326

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8326

```

aaaagtttaa ctttattttt tttactaaa gttcagaaat ttctgtaaga caagtacatt 60
natgaaatgt ttccaaagaa atactgaaca atatatactc tagtttgctg aggttccagc 120
tcaagagttc aaacctaatt cttgtgcaat aaaaatcagc atggatctta gatgatctag 180
aatacactgt gttttgaaat ccacagctgg tttcattttt aaccattatg aaaaaccagt 240
actcctattc catcaaagt gtattataag caataataaa ttcagatcca ctgtattatg 300
caacatacat ctttggaag caacataaac agtgagatca gatcagtaga aatatacaca 360
gttaaaagaa atacacaaag tactgtagtt tttattaaan actactactt gagaaagaaa 420

```

tctttccaca aaatngcata aaactgttga atgatgaaag ggtttgggaa agcttttcca 480
 aaagcttaat tncaatggat cttnctgang gttggggnc a anggnattt ccttcctctc 540
 tggganattc ctggctccct ccacgaa 567

<210> 8327

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8327

aaaatatttc aaagtgtagt acacatttat tttcatttgt tattttcttt catagcagat 60
 tacagagaaa gaaagaaacc tctggtttca tgttctccct ggaaatatta gcattgatac 120
 ccattttatc ctccaactta tgggggaagg gaaagtaaaa gtgaggaggagg gaagagccag 180
 aacctttggg tgaggggcaac tttgggtcag actgccaggc tacagagtta agggaagctg 240
 gccccagaac agtcctgttg cgattctgtt ctacttcctg cattccagca gacttgacac 300
 tgggctccca gacgatccag gacacaatgc ctactgttta tgcacacgta tcagctgctc 360
 tggtaggctt gacaagggtt tgctttaaat gaagggtttg ctaatttggg acccttcctt 420
 catatagttg ggcctgtgcc cccagagca gacattncct ggcctgnata cctgacacag 480
 cttgngagtt cctgcatgtc cccagcntta ccaatggatc cgtaaagggg agacttcact 540
 tggcccagct taaaacagg 559

<210> 8328

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8328

gtccatgagg cattttattt gtaaataatnt gtattacatc cctagaaaaa gaatcccagg 60
 atttttcctc ctgtgtgttt tcgtcttgct tcttcatggc ccatgatgcc agctgaggtt 120

gtcagtncaa tgaaactatg gagtggaaaa agaaagtgtt ggtaagttta atagttcaac 180
 atagtgcctt ntagtgcana aaaacatcaa cactcatcag tggtaagggt cgctttcctg 240
 tggggcacat aggaactgac agtgcctaca tganctgggt cctcatgtag cgtatgagcc 300
 atgactcctg caacccaaag agccaaatnc agagagccca gccacacant cacacaagcc 360
 ctgacttctg cctacacat gaaacaaact gcactgaaaa caaaaggctt gggaactnct 420
 ttaaattcaa aatgttnactt ttctgctttc aggttaaggag actttgaaag tatttcgnat 480
 aaaacttggg gttttgnaat tgnngtttct ncntgtacc tgnattaata 530

<210> 8329

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8329

atagagagat ttaagtttat tgaaatgtgt tagaaacagg ggaagtatct acaagcagaa 60
 tcgtaaagcc aaggacattt ccaaattaat agaaaggaag gaaacagaac agaaacttga 120
 cccatccaaa taaagcaggg gagaagtta aaaaggaaac aaaaggaaca atacacatag 180
 tataagaaaa aatgtctatt atttattaca caataattct gaccaccaac aaccaacggc 240
 gggggcgggc aggagagaag aacatcttgc ttctcaaca actttcctcc cttgctttaa 300
 catttttgag gattctttcc caaacctatt acacctgtat tatgatggtt acaaattttc 360
 caactcttcc actccttcca gtgcattatt tttagtatct tcattaaacg ggcaaaaaaa 420
 aagatcccct acttgtaata acaaaacaat gttggaactg tcattaaatc aggatagtgg 480
 aaaacagatc tgttcccaga cttgcaggac ttttaggtta ggaagtcccc naaaaaatta 540
 aaatt 545

<210> 8330

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8330

```
gttttcaata cactcatata tttttacttt gtaatacaat atagctgtca catacaatgg 60
ctctagtagg cttaaatcaa attgcaatgg gcaaggaaag ccaaagaagg gtttacacaa 120
tattcaataa gcaacagtat ctgttcagtg tgcaataaaa taaaaaagtt ctaacctaga 180
aacacagaaa aagaatttat tgtttttaag tttcagaaat aaaagtaaca gaatagtgtg 240
taatctgtaa caagctgggc ctgtaatttc taaactacag tccaattaaa acatttaagt 300
aatagaaaca atctacatgt ttttctacca ggtaaataata cctgagaggg ttacctataa 360
agaaataggc tttaaaactt ttaaccacaa agaaccttct gctgcgacat tatgaagatg 420
ggctatgcat gtngncagac tnagtcantt tcccggagat tctgctcact gnttaactgc 480
aggtagtggg ccatcaatgg ncagagtntt taccatcaat accagttcat tcaaccaaag 540
an 542
```

<210> 8331

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8331

```
actgnatc ctttattaaa ttttgcctta aaaattttta atgctgcatt tttataattc 60
acaatagcaa caaaacatga caattatttg tgtgaaatac agtctaagct ctaaagggtc 120
atagattaca ttcattttat accaggtttg ttcatatata tagattaatt catcacagta 180
tacttatttc ttaatatatc tgcattttat caagtaaaag aattaaatat taaaagtagc 240
ttgacaaaat acagaaatat tctgtgcaat aaatttggtg tcaactgatt catgactggg 300
tcatgaatca tgactgatgt aatcttttta tctttctgcc cagcttctct tacatgatcc 360
ttgggaaata gccagttgaa aagaaatatg gcaagggtatt ctagaatggc cactaaccat 420
agagtctttc aagatgtgca ngttgctttt tggattcttc ctgnaggnga tctggctctt 480
ctagaataca gggatatctn ggattaaaaa agtccgantt tcctcatgaa ng 532
```

<210> 8332

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8332

```

ggatacataa tctttcactg tatttgaggc tatcttgagt ctctggttga gatctgggtc   60
actaaggctt ctgggggatc atgtcttcaa caagccttcc aatgaatgtc caaagaaaaa  120
catataatth ccttttattt ttttttttac caaagttctt atgaattgga aaataatttg  180
tttcaaagac ggtgatgaaa ggaaaaaaaa agtttaactt tccaaaggta atgctttcat  240
gaagagttag aaatagcagt tttagtaatt agttgtagga attctggtta agacttcaac  300
attttacctt acttaaaaga tttgctttat gcaacattta atgccagtt ttgcatggct  360
ctaaaaatct ttaaaatgca aaagcttttn cagtgactgg aagccaacac gacaagaatg  420
aaatgggntg accngngaat taaccngggt tataaaaaaa tcccgttcag agacccttta  480
ccaattaag gaacttagcc attccttaaa tgggnntaac ccttgggcaa   530
    
```

<210> 8333

<211> 348

<212> DNA

<213> Homo sapiens

<400> 8333

```

aacatcacat aagtttattt cagatgtaac agcaatgtta aaattgacaa gtttaattct   60
taactgcacc aagtaaactt agccatttaa gtatthtttt aagttattcc ctccaaaaaa  120
ctgaggggagc ttttcttttc caccaccgca ccatggtttc ccaatagtgc tctttttgga  180
ggacttttca attgatgagt aaactgcttt agatatttca gaacttcatt ccccaaata  240
aagctaattc ggacaaacta tatattgcat agatttctct acagattctt tgntttaaaa  300
cctaaatgcn actnaccata ggtggaaatt taggcnantt ngcccanc   348
    
```

<210> 8334

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8334

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cacaaagaat ctttttatag atttttttc ctgtgtggat tctctgatgt tcttaccacc 60
cctattactt ttataggatt tatcaccaac atggattctg tgatgaactg taagatttga 120
tcgccaactg aagctcttac cacatatctc acatttataa ggtttctccc cagtgtgaac 180
tcgctgatga gactgtagtt gtgaagaccg actgaagact ttaccacaca catcacattt 240
gtatggtttc tctcctgtgt ggacactctg atgaagttag agacttgagg cctgactgaa 300
gtacttacca cactccccac atttatatgg tttttctcct gtgtgcaccc tctgatgcat 360
gtcaagggtc aagctccact tgaagccctt cccacactca tcacatttgt atggcttata 420
tccagtgtgg actttttgat gggcttgaag atgtgcactt ccgacccgaa actctttccc 480
acattcttca catttgaatg ggttttcttc actgngggac ttctctgatg ggcccaaaaa 540
atttgaggcc 550
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<210> 8335

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8335

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agagtatcaa acattgttcc agtaagaagt tcaagagtac atttagggct atcttaagaa 120
atatgaatac tttggcttcc attattacat tagatgaaaa aatcaattca aataagagtt 180
gtcatatcct gctatgatta acaaaaaaac aagtagaaaa ataagagagt gtatttaaaa 240
aaaataatca aatgcttttt gaaagacctg ttctcttcac tgccacacat attcatacaa 300
atgacttagt aatctaatat gagaagtggc ctttactta tattaggaac ttggtaaata 360
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tttgttgaat gaatgaacta tctatggata tgaatttact actttaattt gtgctttttt 420
 tgaaaaaaag ttttcaagta agagcaatag taaacatact gaagttcaca tttgctcaga 480
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 gcatttttg 549

<210> 8336

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8336

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 aactcgctct ccctactcca ggcttcacgg tagtcccaga atgtaggaag tgggacagga 120
 tagactttaa catcaccag gcctctgggt tccaaagcat ttttttctt taatgcagta 180
 aaaccattcc tttaaaaccc aaaatctctc atggaacccc tacgtatcaa atatataaag 240
 caggagctgc ccttggtcag ggataatatg tggggcttat ggctctaaga aacacagttt 300
 gacattcact gctctcctta cttcagttac ctcatggtat agataaatgg gctgggcccc 360
 gagagggggc atgacctgtc ctgggacacg cagccactga agcctttagt ccagtgtctc 420
 ttccacagca ccacactgga ttctggagtc ttccagcca gggcagagga agctgcacag 480
 tgccacgata agaagttctg ggcttctggn acctaccctt taaaactgnt ggnccatagg 540
 cat 543

<210> 8337

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8337

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accccactcc taggcaacct ggccatggtg cccggatgca ggcagtattc aagagtttct 120
 tccaaagtca ccagggtgaa aagccattct actacaacct ctacatgacc ttttaaagtg 180
 tacaacttat aggacagtcc tttctggagt actgtggagg gtgaatcaaa gcttccagtg 240
 taagtttatt gtctggcgaa aacaccagag ccaaaaattc caccaaggcc ctggaaagac 300
 tgaagtcctc tctgtctcat acagtaatca tccatgagat ctcccggagc ctgggtgatc 360
 attagcccca tgatacctga ggcagcgtgg actctgccag gggctcctca gacccaaagt 420
 ggagctcact ttggagaagt cggagcttat ggccgttagc acctaaggat gtggctgaaa 480
 ngcccagaac aagaaagggc tttagagacc nngcncangg tnantttaaa acttgggccc 540

<210> 8338

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8338

acacacacaa atcctgattt attccctgtt tctcatacat cgntggcatt gttctactta 60
 aacagcgaca gtgatgactc caaaaaaat gtttagaatt agaagtgcac gttaatctga 120
 gtaacttaag tacagaaaag agttagtaca ccacaagcat tttctacact tttatattgt 180
 ggtgattgtg agacaaacac agtccaaaca atagacttct tgtcctcccc ctccaacaa 240
 ctatctgact ccatagctca tgcaccccaa ttacagcagg tgcgggctg gcataaaggc 300
 ttcttaccag gattccagtt tctcttctc aatccttttc tcatctctaa caaaaatgcc 360
 acacatacat gtagttgtga gaggcaaagt cttctttaca ctcaccacca gggggcgtat 420
 gggagcacia aagcctnaca aaactgnttc aggatcctgc cttttcaagg cccggaatcc 480
 gggggcttcc angaattcta acctgggctt ggaaagggca ttacaaataa actngcnc 538

<210> 8339

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8339

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cttcttggct ggttctttgt tctgtccccc atgctctgat gcagtgccct cttcattttc 60
atcttcgcca tcctctcgaa gaacatgtc taggatgttt cctttgatct tgaagtctcg 120
tgagggtgctg agcttcatgt gctgcatcag gttcaccttg gacttcttag aaagggtggat 180
gagaaatfff tcatactgtt ctatggcaaa gatgagggtta gggattggct tggtttcccg 240
aagaactctg gccatggctg tggcaacggc agcaggtttc tcctttttct ctcccgtata 300
gttcaggctc ttactcttat tctgtacgta agaaatgaaa gaataacaca ggggggtcag 360
atgagaacca gacagcttca ccagcttttc catatftttt ggaattcctc cggagctctg 420
acacacctgg agataatata tgacaagggc tgtaaagtgt ggtgtcattt tgcacaagtc 480
ctttacaagg tgtcacacag ctgctgatgc aaaactgctg gancanctcg tggnaaaatg 540
taagct. 546

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<210> 8340

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8340

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aagatctgtg cgtttttatft ttgtaaacta tatctaaaac atacctcaat ataaaaaacc 60
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atggtactga actgagcttc ctgtcagcca aaactagaag ggaaacatga ccaccacctg 180
acttgttgca gaggcttttag atctgagcac ttggatctga aaacagtttc tcttttagatg 240
ccttcaaata agggacagta tccttgatga caatacagta catacattca caattctcca 300
agaccatctc tgtgtatata aaggtttaacc tggatgaata tttctgcagc aggcattgggg 360
taggcaggca atatgaccaa atatgtagtt tggaggctca aatgaaacag gagaaagagc 420
tcaggaacca tgaagcatgg tgcangtata anggtcaagt attctaacc taagatcang 480
gtgcatgaga actggagang cctcaatctg agacitanac caaagggtgtg gaatnacttn 540
cta 543

```

<210> 8341

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8341

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cagagcacia gttttgttta attgatttta catcacacca gaaagcatta caggacact 60
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aaggcttgat cttagaagtt caaaattgtt ccatatggta aagacacatt cactgcctgg 180
tcaggccttc tgtgatctgg gcctaccctg ttgatccact gtatttccag ctgtttttca 240
ataagcacca tccacacgag tcagtattat ttcaaaaagg cttctatact tgcgatttcc 300
tttctgcat ttctgaattt gtcattgtgc ttatcttgct cagaatttcc ttatttctca 360
aaagtatggg tgtggtacag attttcgggc agcagcatgt aacactttat aggtaggttt 420
tccaattgta ttggtcacag taggcagagt aaattcaata gttttttggc ttaaggnaac 480
aactttcgaa tgccctgaaa ggagtgattc agtaaangaa nggggatgnc nttaaaaaac 540
ttggaccnac c 551
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<210> 8342

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8342

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gttgcgtgc tatttgaatg catgacagtt tatgtagcta tccttctgtt catggacccc 60
tgagctgttt ctgtggggct attataaatg tgctataaat attctgttac agggattttt 120
gtggacatgt ttctatttct cttggattaa aaagctagga gtagaattgc taggttttat 180
ggtagctgta tatttaactt tttaagaaac tgcccaacag ttttctaaaa ccattgtgct 240
gttttgtgtt cctgccagca cattgtactc tggttgtttt ttacatcctt gccgacaatt 300
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ggtattgtcc acctgttgca ttttagccat gcttctggat atgtggcggt atctcatggt 360
 ggttttagttt gcatttccct gatgactaat ggacagtact tttcatgtcc ttttttcctt 420
 ttaattggat aggactcctt tgtgcattct ggacataaag gattgtcaga tttatggggc 480
 acatatcttt tncactcta taacttgcct gttcttanna gtatctggtg atganaaaaa 540
 gggttanntt tt 552

<210> 8343

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8343

gcctttcaac aataaacttt tatttagctc aggaatctgc aggtctgtct ttaagaccag 60
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 tcttggctgg gatgactgga ctctgcttca tgtatttctc acatcttttc agtacattat 180
 cccaggcatg ttctcattgc agaggagcta tcccagtcac acaagagttt ttcacgcttc 240
 tgtatgtgtc aaatctgcta aaacaacatt ggggagagca agtattatgg ctgaattcag 300
 aatcaagaga tggagacagg aacttgccta gtagtgaggg agacccaaag tcatgtggca 360
 aagaatatga cacaagggtg gatgaaagat tcattaatgg nctcagtgc tctactagag 420
 caggcaaggg tgtctaaccn gaatttagta gaatggcttt tgggtgattt tttaaacttt 480
 cttttgggcc cagtgattaa aggtttcaat gaccggggna aaccaaagtt ttttttaaaa 540
 a 541

<210> 8344

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8344

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gatttgggtt tanatatagt ttgggcttaa gtatccttta tctcagatta aatgagacag 120
tgcattgtaa ccacttagaa naatgcctgg aacacattaa ctttcattac taatgttttt 180
ggtcattctt aaacattttc acttctgcca ccacccttta tgcagtctgg cacatagctg 240
tcactcagca aatgtgagca aacaaacnct agagacttta gtctgccagg tctntaacat 300
gcaaagccat ggggccagggt ccatacactc cctccactga gaaaaagacn aatggcttag 360
gctacaaggt ttgggtcacc aaggaaagct gtcaaataat gaagtgggta agcagattcc 420
taaaaattgg aacnttttca gcagcagttt cattcncang gagacngagt aatgccctnt 480
tnaanctggc tcacat 496

<210> 8345

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8345

caagctccca tctagttggt ttaatcaaga acaggctcgc taatccgtag aaacaacaat 60
gcttgcaata caaagtagac ctcttaaacc aactcaatct atagaagagt tgggcatcag 120
tgagtatttc cagccataac aacatttatt agttctctgg taaacatttt aacatttctg 180
aagaaacagc aaagtgggca tgtatcttta atgtggagca ctggggacat atctggagac 240
ctacaactct gaggaacaga gacaagtgat ttgggggata ttctcgatta acaagccaaa 300
gaatcaggaa aatgggctgg aagcgggtag ccacacacct ctctccctgt gtggggcctc 360
taatatgtga ctgatgcctt ccttttctgt gcctttgaaa tctcatgcaa gattggctat 420
aggtgaattg tattacgaaa ccatccaagt tcttctagat tttattggcc tatcgcaagn 480
ctctcttntt aattcaaaaa gcngtnttc ngaaggctct tnaccctct ttttnttgg 540
ggtttaaaag gaagg 555

<210> 8346

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8346

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atgttctgac tgaagccttg ngcataaaac gaccggctgg aatatttact aaattctacc 60
ccccntaaa attataagca gtatttgaac tacttatgct gagctttctt catgatgaat 120
ttggcatggg gtttggtagag agaacaatg ttggctttac tataaaaaag gntgtgtgat 180
ggtaatttaa attttaaaag cttcttgaga gagtaattac nttagtgaag ttaaaatcag 240
aaagngtaca atttttcttt ttactaatac tgnaaagaaa aaggagacn tataatgccn 300
agagttaatt tgntctgaaa caattatact ctttttggaa gcctattgca atttaagaag 360
aaaaaagaaa acttgcctaa caaaatatcc catnccaaac atatctagta aattcaattc 420
tttcacactt aaaactttat gggaaaagtn ttgcaaataa nggcatatca tttcaatgga 480
cttttatttg ccgnaaaaaa ccnncttttt attttagngg ggaan 525

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<210> 8347

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8347

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gccaatcaca aaaaacagac ttatttgaag tatttagcac taaacccac acaattccag 60
ctctgtagct gaggacacag ccacttggca atggcaccag gtgttataca agaccaataa 120
gttaatgtaa aggacgctta ggtgtggagg gccagtgtc agccgtctcc tggctcagaa 180
caaggcactc tgggctccag ttaggacact gagaggccag ggaaaccaac atgccctgga 240
gaaaggggct tagagacaaa ccggaaaagc acagcatcca agcagggtat tcacgcatgg 300
ggggcagagt aggcccaaaa gttgggggtt gctgatgcgg taagagcaca gtgagagaaa 360
tgccaggtgc atcccttcag cctcctgcat cctccccag gttcctttga tgggccatcc 420
tgggtcttcc ttgnaccct tgtgcaatcg ggtcatcgg tttttttcag tnganaaaac 480
tgggcctttt ntanggcaaa cccccaatt tttggaacct tttggntttt tcaaagntgg 540

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tcc

543

<210> 8348

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8348

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agcttaaaga catgaaaaac ccagtgagtt tttattgaat agtctctctt gtgttaaaag   60
tacatattca ggactatact atgttgattt tggaaatatt ctgatgtgtt taatacaaat  120
tcgtagtgtg ttcagagcat tgtatgtgtc tcaccaatgg tacacatttg gattaagcag  180
taataaggcc tataaaagaa gaaatgaaac aatagttttc aacaataaat gcaggaagaa  240
aaactgctga tggacceaac tgagaaaatg tcctttttaca ctatcccttg gtggtcagtc  300
tccctgaatc tgggtgtgctt ataattgctg ggaaggcagt gtaaacctgt ggccattcct  360
atgcatgtct gggaggacca cagccctggg gtggagcact gacaggtttg actttccacc  420
agaattgctt gctcagctta atcccataat attcctttcc cttagatttg gtttctgnct  480
cggtaacttt ttctctctgc atataaaatt tcatggctta aatactttta agtcngagat  540
tggnnttt                                     547
    
```

<210> 8349

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8349

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cattttgaaa aagctattta ctttttttcc aaatattatc ccaaataagg gttttacaga   60
taagggtcaa tacgaagtca aacattctac agaagaaaat cgtttttaca gacattaaga  120
ataattttta cagaagaaaa agctcacatc tatctagatg tggctatgtt ccatgggaaa  180
aatttcagca tccaaagtgc aaagaaaaaa tgactgtagc ttttcttacc acaaaatatt  240
    
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gacaatcttc ccttatagcc tactctttat tgttagttag gatgccaaag gatgatatat 300
 tgaccttttag aagttaggct ccactggaca aggttagggg tatgggggcc aagcatcaga 360
 atgaattcaa ttttaaaaga aaaactggct ttgaccccaa atgaacccaa agttcagcca 420
 gcggcacatc agagataaat acgagttgta ctttcacatt tacaagggtg tgccctcaac 480
 actattaaag acctaatacat tcaaatacaa gctcccatct tccattacta ggtcttgncc 540
 caaagggatn c 551

<210> 8350

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8350

ggggctatat ttacaaatit tattttttta tcccaaaaat acatataaat gaaaacctgc 60
 tcttcaaag caggagggcc ttgcctaac attgtcatat gaaaatcagt atcagctctt 120
 taacacacaa tttacatata tacatacata cacactatat gtaagcagca aatactttgc 180
 tacttacaca tattcctctg gtggaaaact aggacactgg gaaattcccc tgctttccaa 240
 ccttggaag gtaaatacaa cctctctcaa caacttttta aaggatgaaa tgtgtagaaa 300
 catgtaaaca acacaacctg ctttagatct atacatgtta ttagaataaa gaaagaacgc 360
 tgtcacatca gtgacagttt atttctcaaa gaaaaaaga gataacattt gaataaaaat 420
 gcaaaactga agtacagtta atatgatcaa aattgttgtg tcatgctcca tggagaaatc 480
 angaattctt tnccaagnac agattcccaa gncnatttca ancactttgg angctgaatt 540
 a 541

<210> 8351

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8351

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gatgcacaaa ggttttaata ccttggcttt aatgattttt caaggttaag aaacaaattc   60
aaattggttg gagcttcaac tcagtaatta caatcacaat gcattctctga aaggccctgc  120
atttggaggc agagtaatct gcaaagatga tagtttttac atatgtcctg ttacctacac  180
caatataatt actacattat cttataaaga caaacagttg cttcaaactc tttaaaaaat  240
atatatataa tgagtttccc aaagactcga gtctatattc aaagatgagt aaaaaaaaaat  300
ccattacttc cctagggtca ctttcttctt ttactcctgc ttaaattgcaa aagctgatag  360
tttctgattt gtagaaaaat ctaaaggttt ctgcttttta gacaaattca ggttcttttt  420
tgctttttct tcttggtttt ctgtttcatc actttcatca accacacgtt ttcgcttctt  480
tgcttcagtt ccttcacttg gccggttctc ctttggcttt ggtagccac accctttctt  540
tctttaagtg acaataacct tnaa                                           564

```

<210> 8352

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8352

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cagagctaaa cacagtaatc atttattaat tcttgagaac cattatgaat catataatag   60
tttaaaagag attcaggatt accactttca aatatatcca ctgacgcttc caaagtagtt  120
taatgaatga ataaacctat ttgtttgtat ataaatggta tacttggaag agctcaaaac  180
ttttgtatta cttatatgtg cacatacatt agacacttcc ctatcatcat ttttactccc  240
ttttttctta gcaagccctt tctttccaag taaacttcag tcagactccc tctggctgcc  300
cacaaatcct caatcactgt tggccatga aggtttactg cgttcattta ggtgctcact  360
cctccctgag gctcattecc tcttaaaact tctgagcacc ccggaattac tggccccatg  420
tctctctctc tctttacca agacagctgc tgaggctgct gctatgcagg tctacctgcc  480
cctntctggg cctctgcttg ctttacacca atgnccctan cccaggtggc agtatctggg  540
ccccccatt tt                                                         552

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<210> 8353

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8353

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ctttaaacct ttttttattt agagattttt ctggttaagga gatataccat aggaaagcaa 60
tttcactggc agtgaggat gtatatactc taccaaaata ctccttattt taactgtttt 120
taactttatt tacatacgaa gcaaagaatc aatgcatatc cttggttcaa ctatagtatt 180
agccatacta catgaaataa aatgggtgctt gcatacaaaa acttggttgtt tgtaaaggaa 240
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tttatcatga ccaagacacc tgcaccatat ttccattcc tcacagcaca tttatttcag 360
taatcctggt atgtcgggtc ttagcatgag catagtgtta cacgattttc gtacatataa 420
tcacatccaa aacaagctct aaaatttaaa ttgnaaacat tctcatatgt agaaatattt 480
taatngggna ttaaggtttg ctaactggtc aaatttggaa gatatttaat gngacgttat 540
ctnaactggg naggg 555

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<210> 8354

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8354

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caaagagtga aatttattta ttggaattc agaaattcca ggttgtatga catcagttac 60
tcaataagtg tgaattctcc aactcttctt ttaatcccat tttagaattt aatatagaga 120
tctctgattg gcaggaacac tagaaataaa tgttccatgg ccagtagtgc aaatggggga 180
ttgtaggttt tgaaaaacca ccctaagcca tattaagggg gttggaagaa ccatcgaagc 240
ctaaggcata gaagaaaatt tggggttaag aaagatgaag aacaaaaaac agctttattg 300
cttatacatg accaagaaaa ggaaaacatg gcaaaaaaaaa aaaaaaaaaa aaggcaagat 360

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gtgtattcct tgcaaaagaa caagcctgct aacttgggag gaagggaagg tcaggaccca 420
aatagagcca atttcctgga natggcctgt tctactggca cattttcctg agctgggctt 480
aaaactttca gggccttttag ggcccaaac catgctgcta aaaatntttg gccaaagtct 540
ttcacaaaaa at 552

<210> 8355

<211> 244

<212> DNA

<213> Homo sapiens

<400> 8355

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gagaaaatta gcagaaatgg aggaaaacat attacatcct aaataccacc aaattgccaa 120
aatacacatt tgggtagtaa tctccagaga actctctgga ggcacagcat ctatcatgct 180
gatttcctg aacaatatta cagaatagcc ctgtgtactt tctttggggg ggggaggnnn 240
nnnn 244

<210> 8356

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8356

aaacaggaac ttaggttaat ttaatagaaa aaataaaata tggaataaca ttgattttgg 60
ccagtatcag ttacaaccgt tctactatat ttacaaaaa aacaactgaa cattttacac 120
ttgtacagta tttttcagta aaagnggatt tggatttaac aatgggtcac taattgaaaa 180
taaaaagaca aaagaaaaca gaaataggac ttttgtctnt agaaggtag agcatttggt 240
gagtctccaa actttgnact atccattaca tatactctcat tatgaatata tatatttatn 300
cntaatatat aacattaact taaactttga aagcattatg ttctagttaa taatgttatg 360

tagataaatg aggcagtaac acactagtag ttaaaccagt atttccgnga cgtgcacctg 420
catggtcagt gggaaatgga atgcacgctg gtagacccca gtgaaatttg gtggcatggt 480
gatgggtant ccgntccaaa accggcctna ttttancitt ctatnaatcn cggna 535

<210> 8357

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8357

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cagcctccgc ctcttggttc aagcaattct cctgtgtcag cctcctgagt agctgggatt 120
acaggcacat gccacaatgt ctggttaatt tttgtatatt ttgtagagac agggtttcac 180
catgttggcc aggctggtct tgaactcctg tccctgcccg cctcggcctc ccaaagtgcc 240
gggattacgg gtgtgagtca ctgcaccag cctaagttgc tcttttgaat cacctaattg 300
ctttagagg agcaatggan gggcacacaa gaggggtaaa gcacagagaa catttcagaa 360
aatgcaggaa cctttctttt gaggcacaac ttttgnaca gggcaacccc acccaaggag 420
aaaccagtca gaggccccaa ctngaagctg aatgaaggac gatccctntn cctggcctgg 480
ggagcctggg gtcaccttgc agacaagatg gtccaggaat ttactntga cttntggttg 540
aatgagcctn ttttacgggg ggg 563

<210> 8358

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8358

caagttagt cacagtttat ttctgatgtg gctgaatcta gggacaggcg ggctgggctg 60
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cctgcatgga caccatgctg ttgctgcca acaccgtgat gccagcgcc tgggtgccggg 180
 cgtgcgtctc tgcgtaccac gtatgcatgg ccaccgagtc gaaagtgggg atcagggtca 240
 cctgcaggtc acggtcceaa tgctgcttgc tggccagtag cgcgtccagg acggcccgca 300
 tgccttcctc cttgcgctgg tcctggccac tgatgacgta gcagagcgcg cgcacgcgct 360
 ggaagaactc ctcatccacc aggtgggcgc tgctcccgtt gggcaggtag gccagggtcca 420
 ggtagaccgg ggacttgggt ggggtggctg aaccccggcc cggctgntgg cttacccccg 480
 acggcctnga atggcaatct tgggggggta ngactttntg gaaagggtgc cgggttcct 540
 tttantgggt tanttcng 558

<210> 8359

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8359

agggaaaagt atatttacta gacttccata atccatactt actttaaatt caatctagaa 60
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 aggtcttgc taactcacia atttagcata catgctgcaa aaacatctct cctggagtcc 180
 caagggtttt caaatgttcc accaggggca gtcaagacta gattcacggt gctctcttca 240
 tcatgcgcac aaaatgtgtt ttcccataac accatattat cacaagtcta tgaacaattc 300
 tggtagcta aggtaggcag tatagaactc ttacaaata acagtatttc aattatgcca 360
 tgtaagtaaa caatttgctg tgaactgtcc tgtgtatcta atcatttaac acattgcttc 420
 tataagaaaa tactatttgn taaattttag tcataatttc attggttctc atcatagact 480
 gcagatgcca acattaatgg ngaaccaa at ggtaaatctc aattttcttt gacattttat 540
 gctttggaaa ttcanaan 558

<210> 8360

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8360

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ggaaattctt tacangaaat tttatttgag atctcaagnc cttataaaaa gtgcattaca 60
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tatgattcat ttcctaccct aacagaaatg atgaaacagt tttctttct tccttttctt 180
cctcctgctt tgaaagggca actgtcatga gggatatctt aacagaatgt gccaattaat 240
ccttgccagg agagcagtag cttcctactg gctaaattta gagagccctt ggcattcctt 300
ttgggtgtggc tcaaagatta ttacaagctg aatctaaaag attgcaacct actacttgca 360
atctgtctcc ctgggctcct cttttactna caaactccac tctaaaacaa ccttaaattt 420
taagcactca ataattgctt tagaaatgaa gggatctaaa ggtaattacc ttacccttgc 480
aactattttc tgnataagaa tcttcaaagg tnataaaaat tntccgatg aagaatggcc 540
taatcctaaa anggggtgga t 561

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<210> 8361

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8361

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agttagaacc agaactttat tgtagcggat acactttctg acctatcatg agtatacaca 60
tctgcgaagg gaaaccgcgc ggcgacagcg tgaggacatc ccctgggcgt gagcgtctgt 120
ccgctgtcta aacagagcag ctacagggac gggacatgga ggatggccac acatagcaca 180
gccaccagtg tcctcagaac tagcagtcag ggtcacagaa cagtattcaa aatgattgcc 240
cacctgtttt agaaatctaa aattttacat gtaactaaga gcaaagtgt atgtgggttt 300
tagaccatga ctgtttgttt gctctcctgc cctaccacca agcaaagcag cagggtcct 360
gggggagagg gatttcaacc cccctgatgg caggggtgc tctggggagg agagaggaga 420
gaacaggctg ttttgggaaa attccagcac ttgacttcg ggccatgcgt cttntnctgg 480
acgttctgag tacggatcgn taaggcctct ggccgtttcc aaaaggagt gcaaccggct 540

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tgaggaacc tnttaa

556

<210> 8362

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8362

gtgattttga catttattaa aaagtatttg tcatcagtaa ccattttgga tacttgcaaa 60
tattacagta aaactctgcc ttaattcaca gggcaggagt agaaaatcaa ttatgtaaaa 120
tacagtgttc cttttttgca acattaacca gaaacattgt ttatcagttt gtactgatat 180
ttaaagtga cacatgggta catatacaca cacacaaagc taaacttcag cagatgggtat 240
aatgtataga gaccaaactg taagaaatgc agcacatctc tgctcaagat ggaacaaagg 300
gtgggaacta accccaatag ggttacaatc aaattaatgt tatttcagat catcataatg 360
cttattgttc tacatttcaa atatttactt gaaatgattt tattaagatt acttgcagga 420
tttctccttc aaatcatttt aaggttttaa aaatgcctta aaaatttcaa acctttanct 480
ttacatcttt aggtanttag caaaagtnc tngcccctac atgggttgna aagnnccaat 540
ttggaga 547

<210> 8363

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8363

cccaaattac caagaacctt tatttaacct accaaactaa aagagcaata aaataaaaaat 60
attttccatc cacaaaacgg ttttacatca actacactga ccaatacaga gaaaagggaa 120
atccctgagg aactgccaac aataaataat atacttaaaa tagaatgttc tgagtgtaaa 180
ggaacatttc ctgagcccgt tcagtttggg gaaatttggc ctttgcaaa attcagtttc 240

tcaaaaggat atccaactga tgcaagtttc ctgtcatgac aagaagctgt catgttcagt 300
 agcaccttac acgaaagggtg gggaaatagg ccgggcgcag tggctcacgc ctgtaatccc 360
 agcactttgg gaggccgagg caggtggatc acctgaggtc aggagtttga gaccagcctg 420
 ccaacatggn aaaaccctgn tntntnctaa aaatncnaaa aa 462

<210> 8364

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8364

agaacaaaat ggtttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa 60
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 cccaggctgg gcaggcaggg ggtgggaagc aggacagggg gcagggaggg aggggtgggag 180
 gcagggagga aatggcaggt ggctggaaca caagaaagca aaggggaccc agctggtcct 240
 tgggccccag ggcccagccc caatactcct gctctccctt ctccctggct agagaaaggt 300
 cacggagaag agacagggga gcaggtccca gcagcaggag aagcagcagc agctgtttcc 360
 ttcaccaata aatatacttc attaccaagc tagaagagag ggggtgggaag agggactggg 420
 gtgggaagga agggggagaa actgccacct gtgttgctgg gattaaagca atgagatggt 480
 gccaganccc ccaccactat nctaaccctc anttgcttn ttnaaactgt gaaaaancct 540
 tttaaattgg cccccttt 558

<210> 8365

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8365

aagggtgaag aggagtttta tttagtgtta gaagagctca gaggagtggg tagctcctct 60

ctggagacag attgtcccat gagtcaatc attcagctct caacagagag gaggccctgg 120
 agagagtggc tcctctccgc aggcaagtca ttccaatgtc tctgcaggtc tctgaagctc 180
 gcagcagagt gtagctcctc tctgctggca ggtgggtctt gtagctttca gcggagaagg 240
 tactcctctc tgtagctggg caccaccacg tctccagcta tcagcagaga ggggtactgct 300
 ctctgcagct gggtcatcctg tcccctcgtc tctaccatct tcatcctctg gctattctct 360
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 attgggccat tggcaggccc anaaaaggct ccacgaagtt tncactctgg caaanggact 480
 ggcanccac cccagaatt caagccctc ctggcctgaa ggtggggnc t tactggggac 540
 cccanccctt cttcctgttg cant 564

<210> 8366

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8366

cagactttaa agtttttatt attttatatt acgcatgac ttgcatggaa tgaccacaaa 60
 gtggcataac cttcctgggc atgtaactta actcatcagg cctggctaga aagtgagaac 120
 tcccagatac acaatttagt ccaccagaaa catggggagg agcaaaggaa agagaaaagag 180
 acagaggaag gcacaatgat aaataattat ctgcctcttc tctaataagg tagtggctcg 240
 ttctaataat gatgataatg tcattgaata caatctctga ttcatgggtca aggtcttttt 300
 gttaaaggaa aggaggtttc ttagaaggac tggatctaata caatacatat ttgatgttca 360
 aatgtttgac tticaaacia aattttttaca gccaaaataa aatgaaagaa atgatactga 420
 caagctctct tgccatgcc ttgtcaaagc acccacagaa agaataagtg caaaagggtac 480
 aaaggccctt cccttcatcc aaggaaacat ntncatggga gtntgcagc cgacttcctt 540
 tccntacca accccacacc ttaggtca 568

<210> 8367

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8367

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gaaataacat tgtgacttaa aggatttcta ggtcctaaaa tctggaaaag ggatctggaa 60
aaatttggac tccatgagta gtttggattc aatctctctg tgcttttttt tttctttata 120
acaggaatgg gatgggggggt ggggggaata aaacttctta tgctatatag gtcatgtact 180
gtgagaaaca agaatacaaa actatgggtt taaaaacaac atatacagaa ataatcgcca 240
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agtttttaag agaaaaggta gattgagaag tagaaaggaa gtaggaagga aattgtgcaa 360
aaaaagaaac agtttattag atactctgac cctgggacac actgttcctt tccccaaaat 420
attttccgtg ataggaactg aatttaaaat taccaccttg gtagaattgc ctggaagatn 480
cagcaactaa aacctggatt aatgccact ttcttaaaaa atgccatta actnttaacn 540
ctggcngaaa aatgtaatt aatttt 566

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<210> 8368

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8368

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aaattgccaa tttatttttc tacccaatcc agtatcaacg atatacaaaa ggatataaac 60
agactatcat gaatatattac aggatgacac accaaacaat taccaaggaa caaatcctgc 120
aaagtaacaa attgttgctt atccatgtcc actcaactgt acaaggttta tttctaggac 180
aatttcccag ttctctggga aggaagttct gtggatttat accttccata agggtaagc 240
aaacatgcta agagctgata ccatcatgtt ttataactaa cagccgagaa aggcttttaa 300
agaacactct ctttcaggcc aatgttacag cattagtggg ctcatagaca ggatgtgact 360
tcatcaaagg aaatgcttct ctctcttgg tctccctaan gtcctcctcc tagtacacag 420
gaggagtcc ccataataac accctgggtt ccaacanaat ggnggggtag attatcaacc 480

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ccncaatggn gaaaaagaaa ctggaccccc ttacettacc aaatccattc cagaatctgg 540
gggaggcagt ttncaaaatt tttacaggn cgaccctttt n 581

<210> 8369

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8369

gagattcgac cacaaacagt tttaatggtc tggttttctc cctagttccc caactgtttg 60
ttagtattat tattactaca agaataaagg attcctgaga gcctgtcccc tcctctcctg 120
tggccccctt gacaggactc atccctacca acccccacc cccccgccc ggatttcttg 180
ggaaaaaaag aagtgaaagg cactgcaggg gtagggggct tgagtgccan tgagttgggg 240
ttgggcgggg gcgggggcgg tgggtgggcac tagggcaggg cccggcctag aggaggaaag 300
ttccagtcca tgcctgaagg aattgtggan aggtgtgtcc atccatgaca ccccatcag 360
tccttcctg aacctgtcta ncaggcntac ctaagtccca tntcccacc cccaggccca 420
cactgggggt tctgnagcag gagcataaaa ttaattagtg ttggctcaca aaggaggaat 480
gganngtcca ttntattgga cttcaanggn caaaacccaa agggagggtg caaaaaacta 540
ggataatcct caaatgctct tntnttaa 568

<210> 8370

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8370

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gattctgtag aaatagatcc ttctgattct gcattctatt tccttatggc aactacaaca 120
ggaggaatcc agctggaaat gccactaacc ccacaatcca gcacctgaga gaggaagcca 180

gtcggagcgc cgtgctgggc tcactcactc tggcctgcgc actgggggttg tcacatccat 240
 tttccactgg ctatggggaa taatatttgg ttaaggctgt tgaagccctt gcttttgagg 300
 ttttacatta tttggtaatg aaagccgttt tttcttcctt ccccaggctt atgtgaagaa 360
 gcccacgccc actctcaaca aaacagactc ctccttggga agcatctcca gccctgggac 420
 agacacctcg ctgcgactta gggagggaca ggattagccc aggaataaaa gcattttaga 480
 aatggtttct gcaccttcan agctcaacaa ttcttgnacc ttttanatgg aagggatcna 540
 aagtgaacana acctgttttt 560

<210> 8371

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8371

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 agaaatgtgc tggttaagtt actcatcatt atcttattat taacaaaata aagcactatc 120
 tatgtttaca gtcataaaaa aagaaacagc ctggagagaa gtgggggctt tgaggatgga 180
 gagaagacng gggcagacac agactccaca tctggccctg tgggatttgg ggttcccata 240
 ctgatccaag ggctatttag atcttcagag ttaggtgaca atgggatttg atttccttag 300
 ggaacaaact ttgtgaaact gatcagaggc tgagatccag tccctagtat taagtggggg 360
 aggtgagggc aggnaatgtg aggggctggg ctgggtntta gangctgaan cccaggantc 420
 ttttcacctc ttccaagaat ggggcccccc 450

<210> 8372

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8372

acttagaata tttattttatt ctctgacatg acaagacaca aaaagttaca acttcttaaa 60
 actcttcaaa agaaaaaaat ataattctgt aagcagcagc agcagcttcc aaggttctga 120
 tgtgacgggt ggggcagctc ccaggagcaa ccgtgaactg ggggggtcca ggcctgagcc 180
 ccaggtagtg tcgctgggaa ggggcctctg tggaggggccc cggttttggg gacacagcac 240
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 cggctcacag cagggatcgc ccggtggcag gggggatggg gcttctgaag tgtggtcagg 360
 ggccttatgc ccggaggcgg gaaggatggg gcttctgcag tgtaccagg ggccttatgc 420
 agaggctgaa aaaggagggt gggccctgaa aaggacttgg ggggtgtggca acttctggcc 480
 ttccttcana acaaggcaag cacccttaag nttcacactt gtcccaatgn c 531

<210> 8373

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8373

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 gcagtgagct tgttgaaggc atctgctaata ctctggtaaa taactgggtc ttgctgactt 180
 gatagtaatg tttcgaccag ttcagaatat tcagcctggt gcaaacacac caacgtgtag 240
 aaagcttcgc cagccgcagt ggtcatctct gtgttgtgtt tttgcaaac cagcatatca 300
 aaaaccagct taagaaagtg ccgtgttgct agaaaaagtg gtgagtctgt ttcttgnngct 360
 tttgcacact gttcagctaa cggtgtcaag gcttncaggc aaagctggca aaccttcgaa 420
 ctcatgatg cattcctaata tctaggaggat acatcagact tttnaacaga tcctcangaa 480
 acttggggan tttttcaggg aaaatttccc cgattaatgn gnnta 525

<210> 8374

<211> 521

<212> DNA

<213> Homo sapiens

<400> 8374

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agacttttag aaaccttggt tagtcggtaa caacattcag tagataatta agggaacaca   60
ctgcacaaat tcatttccca cttagcctga ataagcagtt tgactactta atggtttcct   120
attgtaagtt ttcctatggc cagggaacac agctttgtaa gtagtccatc tttctaaaac   180
tgaggtaact ttctaaacat taaaagtctt tagtaacata ggggaaaaat taaggcttaa   240
ttacttagaa aacaaaatat cacaattaca gaagcacatt taattacaaa aattataaaa   300
ttatattaac tatatgtagt ttttaatatc tagtatcaaa ataccttttc tactttggta   360
actaaatfff tgagattaag aacaaactag ttcaatcatt ctcacataca aaaatttcat   420
ggttatatff attaaaaacn aaataatgcc aggtctggtt aaggtacatc ttttcccag   480
ataatatng  gaatgnggga accgaattgt aaaattcaat t                               521

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<210> 8375

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8375

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gggatgggaa aactttatta ggtttggttt ccagcttcgg ccacgcgggc tccgcccgcc   60
ccgagctcgg gtcacggggc gcccccgccg cctcctcgt cgtcctccac gtcgaggccc   120
gggatgccgc ggatctggcg ttgcagcagc cctcccagc aagggcacgg cgccctcctc   180
ctcctcctct gggggcgggc gcggtggcgg caacacggnc ccgggggctg gctctggggg   240
cacgggaggg tgcgccggca cgccctctgc accctccgag atccctgccg gttcgccctg   300
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tcggtgaaag ggntctcgcc cttcaggtaa cgctccagct tnttgctgat gaagcttggt   420
gttgagaata ctggggggca ccatgaagga ggactttttg gactggtcca atatgagcct   480
nccgnttccg gttgggaatc catgggcttt aaanncttnt ggganna                               527

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<210> 8376

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8376

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aaagaaaaac aaaaagaact ttactttcct atgttaatac aggtcaagag accctttcct   60
ctcaaaaggg ttggtaacac cagttcttag caataaacat aaggcacttg tttagattac  120
aacatcactc ctttttttcc acttggtttt ctaaccctgt tttccccca cagtatcatt  180
tgaaattaat aggatgaatg aggcaaatat gagacgatcc agttgatact actcagagca  240
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aatagttcca gtaaaattgg gttggaatac aatacacatt aggaatttag cttctcacgg  420
gtggnatctg catcttaaga ggtctgagtc ctatgaatat tcattcttag acaattcatc  480
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<210> 8377

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8377

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actgtgaaaa gtttatttgc atcgattaat tccttttttt caccatcata agagatatig   60
acatttgttt gctatttgtg atcagagaaa agacattttg gaatggataa tctgtttcta  120
ccattcttta aagaaaaaag ctttaaaaac aaaattcaag tgcaaaaatt tccagtagtc  180
ttcctacctc cagtgtaccc cagcaaaaata ttcatagctg tgctgttagg aaattaatca  240
accataagct tcaattaccc actttttttc ttcctaagg tgtctgtact tatgaaaaca  300
tatatagcat attcctgaaa gtataccata ttcctacaaa gtaaggagc ctagaagcaa  360
cagtgatcac tgcctttcag tgtctccaac cccatgtaac cactgatagg ataattcagt  420

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ctctaagtca ttgatctac ccatttccta aatacagcga tcaacttcta tttacaacag 480
ctagtctggg gttactaaca cgttccccca aaatcaatag ggcctg 526

<210> 8378

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8378

attttaatca gatatacaatt tattatggaa ccattcattt tctgctcatt agcactaaac 60
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gacttacatg tataaaacat gaacaccccc aaactctggg gagtattcca gaatggggca 180
aaagagaggc tgggaagtac catttactac acaaatgtaa taagatggac agaaaccttt 240
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gacgattcag aggtgggtctc aaagttgtta cagtgttaaa aaaattatag taagcagtat 420
aaaattcaat ttattatggg gccagggggg attcacaacc attctttaaa accnttagag 480
ccaacccng gcaagccttg nggcttacac cctgnaatcc cagacttttg g 531

<210> 8379

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8379

catggcacag agtttaatgt gaatcatgag atgagacaaa agcctcctcc agggcgatgg 60
gaagaccag ccccaaacca gactcttgag cagcgagccc taaaccagac tccgggaagg 120
ggctgcgtgg tcatgcaccg cctaagactc agaggtgaag atgggaagac ccagccctaa 180
accagactcc tggaaggggc tgcgtggtca cccatgcct aagactcaga ggtgaagatg 240

ggaagaccca gccctaaacc agactcttgg aataggctct gtggccaccc atggccgtaa 300
 ggctccggga tggagacagc atggacaggg acctngcaca aaggcatgtc gggagggcct 360
 cctttccaag gnanagnccc acctgntcct tntaagcccn c 401

<210> 8380

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8380

gaaagtttta tcaaagctaa aatttatttg gtgcatactc ctcttgatat caggtatgtt 60
 cgcatatacc tttttctttc atgtgtaaaa acaaccatgt gaggtatttt acaggtcaaa 120
 agaaaacaaa aactacttcc ttattcagtg taaaggaggc ttataagcat tccaaaataa 180
 aaacaaacaa aaaccagaca agtacatagt ctatttccat ttccttttat acatcctctc 240
 tatatatcac acatttagca ataggagaat agagaactaa ttcaaatgca agggaatctt 300
 tttttagat tctgttgaca gatgctcttt aacctaaaca ttttctactc taaacataac 360
 ggacttaatt gncctcagta cgtgaaataa ttttaaggng atctagtact ttgaaaattt 420
 cattcactta agaacactta agctggaaaa tagcactatt tttcagangc aattctnaac 480
 ngnaaaaangn cat 493

<210> 8381

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8381

ccagacaaaa tgtattttatt tatttttttg agacggagtc tcgctctgtc gcccaggctg 60
 gagcacagtc tcggctcact gcaagctccg cctcccaggt tcacaccatt ctctgcctc 120
 agcctcccaa gtagctggga ctacaggcgc ctgccacat gcttgggctaa tttttttgta 180

ttttttagtg gagacggggt ttcactgngt tagccaggat ggtcttgatc tcctcgtgag 240
 ccgcccacct cagcctccca aagtgcctggg attacaggcg tgagcaacca cgcccagctg 300
 tcagacaaaa tttttaagaa aacaaaattt tttccagaat attacattac aaaaatcaat 360
 gaataaatga actacactgn aactttaata cttattccat atgaaaaacc aaactgggtc 420
 tggcaatttg attgatctct tgagaagttg cagtgcattc attccatggg tnaaaccg 480
 tggtaggcat tggcgnct gctgctggg gaatggcttc tnggcttggg tgttggtgga 540
 aaccaa 546

<210> 8382

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8382

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 ctcatgcaac acgacgctca ccgaggctcg ggccgtgggg ccgtcagaga aaccttttta 180
 aaaaatggag atgaatgtta cagaattgga caaccgaac tgcttttcaa aaccagagga 240
 aggaggttct tagccgttac tcagatacca atgctgggga gggaggcctg acttcagcaa 300
 cagctgtggg tgggctggag gccggcgag cttggggccc cccacgccag cttgtctnaa 360
 ccaccacctg tgcggggctt gcttcaagg gtcaacaaga gcaactgatg gcttgccact 420
 ttcangcccc gagagacaag gcttacgtac tttacttgca gccaggtcc aagccntgg 480
 aaggggtcct agctccgttg aattctgnat nccaagtggg caccttgagg aanggtcttn 540
 aaggaangct 550

<210> 8383

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8383

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tccaaaatag agctcttggt ggattctggt cataaaattc tttttaagc ttgttaagat 120
cttataaaat aagaaagttt tcccaatact ttagaaaaat tactaatcat taataagtcg 180
atttataact caaagtaatg gcctaacatt ttgaaagatg aaacaacgct cctcttttga 240
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atattgcaac ctgaccagat gactctggga gtgaattaaa tgcttaaaag aggtcagtct 360
tgcaaattcg atgaagcaca gaatacaggg gaactgatct gattctgata aaagatacat 420
tactctcaga aaggggtgaa gcttaaaatc ttgcagttct tgggcaagga aggagtgcc 480
ccaggcaggc accaaccggc ttgaaaggaa aagcttgagt gaattcaagg tctattggga 540
gang 544
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<210> 8384

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8384

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gcaatttcag ctttaagtct accaatttct tctgtcaatt gttgaatacg cttagtatga 120
acttcctttt cagaaaggag cttccgatat tcttctgtat ctggatcttt ctgttgactt 180
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tctaactcca gtttcctcac ctttgcttgc atttgctgna gatcctgntc tagtctctcc 360
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atcagntctt catgctgagc cattggtttt gcaggtaacct naacatttca aataaatntc 480
cttccaacat ntaccaatag gtgnaagcta cccggtccta tgagctcaaa nctc 534
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<210> 8385

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8385

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gaaatgttat gcagtcattt tttaaatgag gtaaatttcc atgtattaat gcaagaggag   60
gtccagaata caatgcaaag tgaaaaaagt tgcaaaacag tacatataat atcccatttc  120
atttaaaaaa aacctatata caaatgtgtg ggtattcata tatgtatata tgtgtatatt  180
aatatataaa cacaaacaga acaacatctg ggaagacaca caccaaatta agttatttctt  240
ggagaatggg agtggtgaga gggactaagg aaaaatcttt cactttttac ttacacatt   300
tatgttttgc ttgaattttg ttggctaaca ttaataattt ttgaattttt atcacaataa  360
aacattttta caaaataggc acttttgtaa tcagatcaat agagttataa tgnatgtgtt  420
ttaaataaaa atagctccat gggggctggg ccgtantggc tcacacctgn aatcaatccc  480
aacactttng gaagncnaag gnggccaaat atccggcaag ganttgagaa cagctggcca  540
a                                                                    541

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<210> 8386

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8386

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gtatcacgca gatttataat agccgaagaa gcaacataga tggccgtcaa tggacacatg   60
gataaacggg gaatatttgg ccatggaaaa aaatgaaata taggttgagc attcctaadc  120
cccaaatcca aaatactaca aaatccaaac tttttgagta taatgatgcc acaagtgaaa  180
aatcaacat acaaatactt aatacaaact ttgtctcatg cacaaaattg ttaaaaaatat  240
tgtataaaat taccttcagg ctatgtgtat aagatgtata tgaaacaagt gaattttgtg  300
gttagactct ggggtcccatc tggaagacat ctcatatgt aaatgcaaat attccaaaat  360

```

ttgaaaacat ctgaaatcca aaacacttct ggtctcaagc attttgggta agggaatact 420
 taacgtaaac ggacacaagc tacaatatgg atggactttt ggtggtaatg gtttttgaga 480
 cagggttgt ctgtcccca ggttgaaatg caangnnca acatggntac cgtgccn 537

<210> 8387

<211> 501

<212> DNA

<213> Homo sapiens

<400> 8387

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 tagatcattc ccatctcacg ctgctttaga ggtcagttca caccttctgt gttcagatga 180
 gcggctggaa ttctgaacac tgccgtcttc cagccctaac gctgggcgct ggtccctctc 240
 tcctaagccc acggctgggc ttccctgtg ccagggtca tggcggactt naagccaggc 300
 cggctgcccga gaatcacact cagggttttt ggacgctcaa gtccacagat gctgaggtgc 360
 ccagacgagg gtgagcaggg agacacatgc ctcgagaaac gtgcccaggc tggccaggcg 420
 gctgcnggaa gcttcttacg ggcanaggaa aacntcttgn gccttnccta tcgatctcca 480
 gccntgaagg gcaacttcng g 501

<210> 8388

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8388

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 agcctcccaa gtagctggga ttataggcat gtgctaccac acctggctag tttttgtatt 180

tctagtagag atggggtttc accatgttgg ccaggctggt ctgcaactcc tgacctcagg 240
 tgatccacct gcttcggcct cccaaagtgc tgggattaca ggtgtaagcc accactcatg 300
 acccaggtct ccccatcttg atgccttctc ttgccccaca ccatacagct ctgcctggag 360
 cctggaggct ggggtccagag tggctcctgg ctccccactc tnaacaccag gaattcacca 420
 gcccaggagg ctgataagtc tgggaaaact tctggggccc ggctnttttt aagattncat 480
 ctgctgggccc aatgggggnt ttggccactg gagcccggtc ttgccccgn attgccac 538

<210> 8389

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8389

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 tagtaaaaaa caacatggct tggtaaattt agctcttttt cttgacattg gcaatgataa 180
 tacaatgcct gtggtgtata attgtcatgg ctgacttata aatccctaca gatatgtggt 240
 tacttctcta ctttcccttt ctttggcttg ggcaactgcc acgttgatgc actggagcca 300
 ttctgctgca ttcttctcat ccttggcctt aaagacatag gttttattgn ctgtgaagat 360
 ttcgaaagcc ccnnggagaa aacggccctg cgtttcttgg gcacaagcct tnacactctg 420
 gcttttgctg agtctattgg gcancntcan gncatcttt agacttt 467

<210> 8390

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8390

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tttgaaaga ggtaatcaaa aaccaaaggt taaaagtggc tcatataact tgaaaatttt 120
 tagatcaaag gaatgccact ttgaaaaagt tttacgggtca gctgttaatg aaatgactta 180
 catttttggga aggactccta ttcggtatgt agtctgacct cgcctactcg agtagttccc 240
 tctagtatcc ttgccagtct ttggcttcta agatctgaga atttctgggg atggggagtt 300
 cgagtcacaa tattaagaac tagtttgaag ccagctccag ggtagtctgt ctttaagtct 360
 ccactactcc gctccaaggt gactcataag gtcgggtccgt caactctgca ttatatggcc 420
 tcaacaacga aattaaaaca catactttaa cctccanan cttcttttg caggccaata 480
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<210> 8391

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8391

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 aaagaaaatc tgaaagttaa attacaaaa cacttataca gaaaacttgg catttcaaca 120
 gttccaaaca catgtacaca agttttttct aaaatcagtc agaaataaaa taccttgtct 180
 ccctttcttc agctgcttct tgtattttta ttaaaaagaa acaaagaaat ctgtaacact 240
 gaataggcaa caacttattt cttgagaaca taaaagtaca gtaatatcta caggtgtact 300
 gggaaacatg agttaggtat tgtgctagcc tgtaacttca ttactgcct cctcactgag 360
 cacagaggag agaggaggtg gcacagacct ggtctataga tactgacagt tttgnggcat 420
 ctgaatccca gccaccagaa gcaggtgagt agctactggg gaaagacagc ntttcagaag 480
 ccagctggct aatttgggga aaatggattc ttcctggang gcttttttga aaatttatgc 540
 c 541

<210> 8392

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8392

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gttttttttt tttttttttt ttttttaaac cattactgng actttattat aatagttaac 60
aatatttttag nggtatacaa tcatatcaca attactcaag ctatatacaa acaggtatit 120
atataagtct acatttaaaa aagaaaaagc aattaatgac ctccccaaaa tcacattatc 180
atcaacaaga tttttttcta aaagttacgg ccaatccaat aacaaaaaaa ttcacagtta 240
ttctgcagac attttaaga tgcaggaatt gnattgcaca ttatataatt ataaaccata 300
acaagcagtt atatatitita atctagtttt tcacaaaatt tacattatca tgcaatactt 360
cactgtcaca gaatgatgga actagaacag gttacttac aaacttttaa ttatagccac 420
aaatttagaa ttatttttaa gntatatttc aaattattat actaaaaaaa cacttcaggg 480
taataaaacn ggcccccatc atnatttggg tcacagatca aaatactttt ttagggggcc 540
tccttgggct ttgcct 556
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<210> 8393

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8393

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gttttttttt tttttttgat attcaagcat gttcttttat taagcatagg atgcgaggca 60
cagcaggagg ttttaagtaca atgngaaagc aagagaactg agactgtgat tgacagacaa 120
agggattaac taacgtttta ttctctgccc cccaaaatat cctgtgtatt ctttaagtata 180
tacgcttccc ttctgcctt tcaaggtatc taaggaatga ttgaaaaat ttgttataat 240
ctctaaagaa ttttttgcat agcattagca aaggagtcta tgacaagtac tttgccacct 300
ggtagttctg cgtattctac tccctctggg tgtcactgtc atcctcactg gctgggacaa 360
ggttctgaga ttgtctccc cagcagttgc taagctggct cagtcttggc caggatgaat 420
gaaacaatta tctcctggat caatgcaaca aggagcatga acctttgctt tttctttcct 480
aagtnggaaa aaggcacccc ccgnttcaat ggtggnctg gtggaactgg attggaacaa 540
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g

541

<210> 8394

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8394

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tcaccaaaga gaccagaagt aattaaagag gtatatattac agtagcacat cacagtaaac 120
ggaaaacat tcacagattc aacattgata ctgtttttgt gcttggttac acactgaagg 180
tgaaggatat tactccattt tggatgaact gaatttttaa caaatacctc aatcattaat 240
aaatgctatt ttcattcagtc agtatcatca ttaaattctt cagctgctgc gcctgtgtgc 300
tgaatcactc catttctttc tctttgaaca tcatcatcac aatctgtact gtcattcttcg 360
ttcaattccc tgtcagattc agcagcagct tctcttacag cttcctctgg agtttcattg 420
ggtggaataa atccattggg ggtagatcat ttgaattatc cctggatata atcttcgatg 480
natactttct gatggcccat gggcaagtat ctttgaatgg tcaggcnttt tcgaaggcaa 540
gtgcnttg 548
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<210> 8395

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8395

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gacaggagga aaaaaaattt aataatatat gtttgcacag gatttccacg aaatatgaga 60
ctccaagaag ggtcagatga ttgacactca tacaccatcg tgagctatcg aaaagaacgg 120
cagtttgga gttctgcagg gagttgacca cagaagtggg agagtgaagg gaagaagtgt 180
gtcgtgaata aagcttggct ggttttcaga taaaaggctt tgcgagtggc caggtgtggt 240
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ggctcactcc tgtcacgtcc cagcactttg ggaggccaag gcgggcggct catgagggtca 300
 ggagttcgag accagcctgg ccaacatagt gaaaccccggt ctctactaaa aatgcaaaaa 360
 attagctggg catggtggca ggcactgtaa tcccagctac ttgggagggt gagacagggg 420
 aatcacttgn atncggaagc aaaggttcat gagcttaaaa ccgcccntgc atttccatnc 480
 ccggtgactg tgnagactc ctttaaaaaa aaacggngga aaaaggtnnt tgagt 535

<210> 8396

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8396

gagatggagt cttgctctgt cgctcagggt ggagtgcagt ggtgtgatct cggtcactg 60
 caagctccgc ctcccaggtt cagccattc tctgtcttca gcctcccag tagctgggac 120
 tacaggtgac cgccaccacg cctggctaatt tttttgtat ttttagtaga gacgggggtt 180
 cactgtgtta gccaggatgg tctcaatctc ctgaccttgt gatccaccag cctcggcctc 240
 ccaaagtgtt gggactacag gcatgagcca ccgtgcccgat aatgttctgt ttttgtttgt 300
 ttgtttgttt gttttttgag acagggtctc gctctgtcac tcaggctgga gtgcagtgg 360
 gcaatcacgg ctactgcag ccttgacctc ccaggctcac atgatcctcc acgacagcct 420
 ctggagtgtc cctncacttt ctttcttaag ggcccctnaa ggacatgtca aaaggcctga 480
 gactacttgg ggggaagtct atgggcaagc aggcttgcca naactgaact tgncccttgcc 540
 ctgg 544

<210> 8397

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8397

ctgttacaaa caggtctttg ttaaagatga gaagccaggt ctttattaaa gatgaggagg 60
 gggcaggaaa ggggggcagt gcctcctcta cccactgcct ttgcctgccc ggggtgaggg 120
 agccccctctg ctccacccat gcccccatg atggcacatc tgtatgaggc tgaggcatgg 180
 ggggcagtgt gaagaacagg ggcaggttcc aagaaaaaga agaaaaaccc tccccacagc 240
 cctaataaat aacagaaggg tttgggatga cctgggcaca ggcaagggga gacacagcac 300
 cctgaacccc aaaacctctg aagtggggca agccctactt aagtagggga ttaggagaaa 360
 gtgggtgana ggtgganagg cccgacacag ggaggggctt anaggaaaaan ggggtcccaa 420
 nggcccttgc catgggggaa ccttgccccc anctacagct tggctccttg attcttagag 480
 aagactcaat gacaaacaat gancctatct tccttccttt cctttgacat cttanaaac 539

<210> 8398

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8398

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 atggacacca tgctgntgct gccaacacc gtgatgcccc gcgcctggng ccgggcgtgc 180
 gtctctgcgt accacgtatg catggccacc gagtcgaaag tggggatcag ggtcacctgc 240
 angtcacggt cccaatgctg cttgctggcc agtagcgct ccangacggc ccgcatgcct 300
 tcctccttgn gctggctcctn gccactgatg acgtaagcan agcgcnegcg acgcgctgga 360
 agaactcctc atccaccang tgggcgctgc tcccgctggg caagtaggcc aaggttccaa 420
 ttagaccgn gacttgntg gggttggctg aaaaccnng gccggctgct ggcttacc 480
 ctacgggcct tgantggcaa gtctttgggg gttaaggact ttntggaaa aggggttccc 540
 cggcttttct 550

<210> 8399

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8399

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aagttttaaa aaaagtttat cagcttagtc tccaaaacca ggaagaaaat atttaaatgat   60
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gaaaatgtta aaggaaagct ttcaatacac caactgaaaa aggcatctct aattggccaa  180
ccaaattatt ctttttagatt attttagcca aataaaaaga aatttacaga tggataactg  240
aggtccacta acataaggta gaaacaaagt ttaagctaaa aattaaatct atattttgtt  300
gcagataaat gtgagattta cctacagcaa ttttctattg atgctaaatt aaaagcatga  360
attgacatcg tctaacagaa atggtttgac agatatattc ttggctttaa aatgttctta  420
cgcatatgca tagaaatgcc atganggata agaataatct tctggattgg ctgtncagtc  480
ataaggcctt tgncaattgg agtaccttcn atggngaata tcagtagggc cattaaatta  540
a                                                                                   541

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<210> 8400

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8400

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aacaagaatg cagatgccat ttatttggtc cataagtata gtcgttattt gagttttaca   60
aaacatcgaa tataaataac ctgaaactgt aacaatacac aaaaattggc ttcttacaca  120
gacataccag gcggtacaaa ctgaaaactt gagtaaatta acattgtttt acattaatat  180
acatagtgcc atctaacatt taaaaacaag tttcaatgca tagcactcga tacttctttg  240
aatctgtttc aatcagttta gagtatgaaa atggttagat ctaggctaaa aataattctt  300
cttctagcca aaaataaagg cataatattt ataaccaggt atcaacttta ctaaaccaca  360
atattttgaa actattaatg atacctagg gtattttacat taaaaggca acatgcattg  420
ngttggttta tctcatgact gggtatgcac acacttggtc aaagggtttt taaaactata  480

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ttctactttc aatccgcatc ctgcatgggg ctaacagtct agcaaaatga ag 532

<210> 8401

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8401

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gaaagtcctg aaaacaactg actaggtcta aaaaagagaa aaagatcttc aatcttgga 120
tgcgttgcca acacaacatg acagtagatg tcacacttag gtttgcaaaa aatataagca 180
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tactttccag tacttttggg atttttcata aatatttaga taaaaagaa agacaattca 300
tctccttttag acagacagtt cagggttaaga ctgtccataa ttttaactat ccctttcctc 360
ccaagtcaca tttttgtag gactaaatat atcatactct tggcagttcc cttgcttggc 420
tttctcccca ttctgagttt tgaattttct gcatgactgg attcacctc caacttttgg 480
aaaaataaaa gtttctcact attnaaanaa ggngnattga aatgggatch ctcaaa 536

<210> 8402

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8402

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aaaacaaaca aagaagtagt cacagtacta acatttaaaa cccagaggag gaactcacat 120
gttggtgttt cagttttgac agacctacta ggatgaacta tcctgagagg gctgttgcag 180
agggtgttga tttcagcaag gcatttgaaa tcgttagatt tttttttaa ggataaagca 240
gaaataaatt taaattcatg ggcacctaag gaagatgtat ttggacctct gtgctgttct 300

ttggtgtgcc agaagcagtt ctatcacttc ctcactgtag ttgaagagtg gattcagtg 360
 tatcccacag aactcacgtg aaactgggca gtacacaaga gcaggtgttt tggacgtgtc 420
 tcatcatagc tgctttaaga ggaaaaatga taatnaatgc ctgtattncc tgcccatgta 480
 tttttggtgc tnaaaatggt ttttnaaaat ggcttttcct ggggaancta gtgaagtnt 540
 ccc 543

<210> 8403

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8403

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 tcacagtaga atataatggt caattttagt ataaaaaaaa cattctcaga gatttgtaaa 120
 tgcacttagt gcttgaccag gccttgagga gagatacagt accgcttcca gagcgccaga 180
 ggggccagga cttgaggact tcgtgagggg actcctgcct atctttccct gccttgatcg 240
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 aaaccaggag ggtcccaaga gatccctcga agaaggcaag gatgggatct aagattgcag 360
 gccactgtt agccccctgtg gtgcctttgt gcgaacagga aaatgacgcc ccttctcaag 420
 atgcagaaaa ttgnnataaa tataccaggt tnggtgaaaa gtgngggctt ccttggacaa 480
 aggggccctt gtgcaatgca cannetggac aactgggtccc cagna 525

<210> 8404

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8404

agaacaaaca ttttattatt aaaataaact ttigtataaa agcattacag atcaaaagct 60

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 ggtttacata tgcaagtaaa ttggacatac aaacacttag attccacctc taccaaatac 180
 cttgattaat gcaaagagga gggggaatac tgacacagga aacctgcccc gaaactagac 240
 tggcagagat gtcagggttaa caaactgcta aaagttacat ctccaaaaag gcacttatca 300
 ttgttataaa agtgcttaaa atctaaactt gaacctgttg cctggtttat aaatttacia 360
 gaaactgcaa agaaccacag actagttttt aatatcaagt ttccatacaa aattgtccaa 420
 gaatttattt gcaatacctt acatgtgaac tgaaataaac ttgcaaact caattatact 480
 aaagtttattc tggaaattca atcancttac tcataactca gatgcttttc ttcattnt 538

<210> 8405

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8405

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 gagcagatat gcagcgtgtg tgtgcaccca gcatgtgttt tcttggtccc accctacatt 120
 gtttgttgaa ataaatatgg aaataaggct gagcaagaca gccaagccag ccaaactgaa 180
 ataaattcat cactcatggg ctctcaaggg atggaaaccg tgcatttttt tctaaatgat 240
 tatttctgaa gcactgaagg aatggctata tcaactaatga ggcctgtacg ccatgactgc 300
 tgattataaa tgacctgcag agagacaagg agatagtgga tatgaagggg agatggtggc 360
 atggangcga ggggaagcag ctgctgtgga ggctgcagct gctggtggcc agcantgggg 420
 attactatcc aaaagcaact nttcctgctt ttctgacccc acantaagcc ctcagaagaa 480
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 naaaant 547

<210> 8406

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8406

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aaagaggcca gttcaacatg gcctctaccc tggtagaaac aaaaagtga aagagaagaa 180
aacagaaatc aactaagagg tgttgccagt gtctctcagg agtggggccc tggctgttgc 240
ctgggggtcat gaaaggcaga gcctgcagca tgcagtatgg cagccgggag accttcgacg 300
cacatcttcc tcaccccggc acatccacat cccaacttag gtgtcatgga aatctttcag 360
cagggttctc ctccgctgct ccgctatatg catctgggtc tccaagtccc ctctgtcata 420
actgtctgca cgctccactt ttcattgagan ggtttcgatc ttagcctccn ctgacctgct 480
nggatttnaa caagnTTTTT cttgggtccg gactcctgga atatgcctat ggggaggggg 540
t 541
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<210> 8407

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8407

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atacagctca atctgtaagt gtccaagatc cagggggcag gttctcaagc aggaagcctc 180
aggcactctg gctctgtggg gacctccctt gggcatctgc ttgagaatct ggggaaggga 240
cattatcagg gcaggtcctt tctgcaggcg gtgtcctgct gggagctcag cctaaccaag 300
gcctgggtccc tgtgctcttg accttcattt caaggtcaag gagagggcac ttgacccaac 360
tctgccagcg aggcaaagta atggtgattc aagtagtgng gttcaggagg gaaggtangg 420
ggcanaccag aatgagtgcc cttaaaaagt cctgggcaat gtctgctggg gcccaagcaa 480
tgggcccagc ntntnaaagg ggttgkanaa agggttgaa ccncnnttg a 531
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<210> 8408

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8408

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tataaggtat atataaaaca tgaatgaatt tcatgttttag acatgagacc taccaagata  120
cctcattatg tatatatgca aatattccaa agtctgaaaa aatccaaaat ctgtaacact  180
cctgtcccaa gcatttcaga taagaaacgc ttagcctgtc ttgggaaaca gcagccactg  240
gatggaaagg ggcagccagt agcagaggcc tcagcccctg ccttcatect gagaatcttc  300
tgtaacaaaa gctgccagct ttcagggaag aaaaagaatt ctgtggcctt gacttaagcc  360
cagagaaaca ggaactgcca aaccttgta cccagcagaa cagacagaga gctgacctgg  420
cttcatggca aagcaacagg agaacctgga nanggtcaat tcgggggcca gcagaaccag  480
gctgggttgg aaggcttgct actggaagca aagtggccca cattctanaa agagacatca  540
gggggncc                                     547
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<210> 8409

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8409

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catcccaacc aatattttatc catatgaaca gataaactga acaaaaacat agttctgata   60
aaacctgcat tcacaaccta atgtagttta aagtaaattt tttcacaatt gagggctgct  120
atttaggact gttttgttaa taataaaaac aggaattata tagaagataa aacaccattt  180
tttactgcta tataatgtct tgctatataa aacataccct caacaagtca aaatatttaa  240
aaccagtgtt tcaaatacca aaaatcacag ctatgttact gttcagtaac tccactcaaa  300
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taaatgtag tactgcattc ttgaaggaaa aaaactgcag ccaaggcaag aactctgaag 360
 ttgcaactca gagtttaaaa gacagacccc tactctgcaa actgaagact gccactctgc 420
 ttcaataact ccagcctgnc acattttact tcaattggnn aaagcactct gntgagaatt 480
 ttaaaaggtn ttaaaagggc atccttaaag gattaatntt ggaggctgta acttccttta 540
 ana 543

<210> 8410

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8410

ctatattggt ttttatttat aaacagattg acataaaata agtccagatg gcagcgtgag 60
 tagctgtgct gctgacttgc ttacaaagaa gcctgtggac aggcgagtgg gtggaaccga 120
 ctccagcctg gaaaacctgc cctcccatcc cccttagcgc cttcttggcc ttccggcctg 180
 attttcttcg acagcagttc tggccagggc aaggagctgt ggtgggggca gtataagcca 240
 gggactccct tcccacagat gaggcctagg gctgcaaaag ggccccgtga agaaaggaga 300
 aggtgacagg gatccttctc ctcccatat ggagtgatgt ggtcaaggct ttatgggtct 360
 ctccacctca aagagaaagt gccctagggt agtgtcctct gaanaggggc cagcctatc 420
 tgcaaagggc ctctctggga ccaaagcang gcaatcttcc ttcttctgna acccaanggc 480
 tantgtngga ngagttttac tc 502

<210> 8411

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8411

cagtttagaa agttttatctt cccagggtta aggtgtgccc atgacacagc ctcaggaggt 60

cctcaccaca tgtgcccaag gtggttgggg cacagcttgg tttacacat tttagagaga 120
 catgagacat caatcagtat gtgtaagggtg tacattgggtc ttgaaaggca ggacaacttg 180
 aagaggggca ggggcttcaa gcataggcag gtaagagaga aagggttgca tttttttgag 240
 tttctgatta gcctttcact gaatatacaa tttacatgtg agaggagagt agaggaatag 300
 tcagttatac cttaatcttg cttagtgaag catgaaacag agaaagcaat catttatgca 360
 tttgtttcat gtgaagactt tgagttcttt gtccataagg aattcccttg tgagcaaatt 420
 ttatctttgt ggctggctta tttaggaata aaatgggang caggttgncat caatcaagtt 480
 cccacttggc ttcctttggc ttaaagggtt tgaaantttt cnttcatatt aacctaggnt 540
 aaaaat 546

<210> 8412

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8412

atccaactcc aaattgttta atctcaattc cagaggtcta ggccaggcca ggcacctggg 60
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 cccgggtctt tagatcgtca tcttggagtc cggttccatg ttctcaccgc tcttccatga 180
 tgactccttc tgctcagcct cctcccttgc cagtctcagg gaggatcctt cacagccaat 240
 tcactccttg gtcccttcc caggggacgt caacagtcta ggcagggacc cttgccccca 300
 actcaatccc catcaccaca gccagcaaag cctnctcag gggccctgcc tcttcacctg 360
 ctgccttcac aagccccacc agggccagac cccgcttncat cgggcactgn tctgacccca 420
 gtgtcancgg gcacagtggg caaccagccc ggggccggcc aagcggaaca ccttaaccac 480
 tgacttccgg gcaacccttg ggtccaagtg gatnctgncc aacggctttt tcaagttctt 540
 cttcaagcca 550

<210> 8413

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8413

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gcagtttcaa ccactttatt agggtatatt aggagtgaat tcatggatat gaacttcatt 60
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cctcttccct acataatagc aaataactaa cgtatatgaa gcattgggtac actattttta 180
atgcaaaatt tcttaaactt tgattcctat atagtataat ctataaaagc aagaaaaatc 240
aaaattatca gtttaaatgga caataaggac agttgaagta tgtgtcttca agttcgagtt 300
aagccattaa attttttaaa gtaaataactt aaaggtaaata tttatataaa tatgtcaaaa 360
tgtagatcta tttatcttagc actttgntca ctacagataaa tttatattgc atatctaata 420
agatatgcca tcactctcca aggattatac ctctattaat caaaccaaac caaacaaccc 480
ttttaaaggt antcactntt tgaaaccga angggaccat ttcaccatgn aattgggtta 540
ccttt 545
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<210> 8414

<211> 516

<212> DNA

<213> Homo sapiens

<400> 8414

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gagatggagt ctgctcttg ttgccaggc tggagtgcag tggcgatc ttggctcact 60
gcaacctctg ccttcccagg ttcaagcat tctcctgcct tggcctcctg aatagctggg 120
attacaggct cccgccacca caccggcta atttttttt cgtatcttta gtagatacgg 180
ggtttacca tgttgccag gctggtctca aactcctgac ctgctgatcc accgcctcg 240
gcctccaaa gtgctgggat tgcaggcgtg agccaccacg cccggctagc acttcccttt 300
ttaagctagt gctggcatgc caccttcccc tcaaagcaga gtcaacttcc tttgtttga 360
gagttttgta ctggcctctg taggccttt tcaggataca aaataaagt cccttcagca 420
tccacatgcc antgggttgc ctccagtgt caaaactggg gtccanantt tgggcaatgc 480
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atntttccaa gaattaaacc ncatggctac acncnc

516

<210> 8415

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8415

aagaaaagat aagcagtaac atttgtgttt aagctgacag gagtgtggca gtaactgctg	60
acattgcaat ctgaccgaga aagaattata gcagaaaaca ggacatactt cacttagcaa	120
taaaatggca cattttaaat acatatatat aaaattttta caaatcaagt gtgaaacaaa	180
agcactgcag tagctaaaat gggaagaaaa aaagaaaaca agcttcaatg gaaataataa	240
ctaactttag aaaatgaaaa gcaaaaaaat atatatataa attcacctag acttaagaaa	300
catcgaaatc tggaaatcag caactaagta agctctggaa atagactgca cattaaaaag	360
cacctttact tatgtgctct gaaatcatag cagcaagctg gtgtcagaat aataaccttg	420
agattacnaa gtgtacatat gggccattaa agctgttttt ggaataaaca ttttncagaa	480
gtgataaaat gatgctctgt ganccaaagc nttnnactn tggaatttca tagattttaa	540
tttn	544

<210> 8416

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8416

actatgaagg gcacatagta tcittattga aagaaacatt tattgaaaca ttatataaaa	60
tgttgactaa attctgtagt gtatttggag tgaacatcat cttgaataga gattttaaaa	120
tttcataatc ttaacctccg acgatatgat tatacttggt taaaagaac attatatcca	180
gatataaact taacaaatga aatattacaa aatatgaaca tagatagttt tgtttcccat	240

tataattccc agcattttca cctgtcctg ttcatacgag tcaattctct tcttcaattc 300
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 cagtctcgca ctggctcanc ctcccccttc agcgacacca tttccctacc aggggtacaag 420
 ctgtttcctg ggctctaagt ggagtctgat ttggcattcg gtcccatcct agngctcttt 480
 aagctnggac cctgaatcac agaaccctt tgcttgncta atattaccnc cgccgg 536

<210> 8417

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8417

aaaatttcat gtttattcat atttttcaaa atatatgtac attaaaaag gaagatttac 60
 aacaggaaag attgccttac atgcaacaca aattccaatg aattcatgat gggatcacac 120
 atgattatga tctaattcaa gccaatcttc tcaagtccat ttcccagcca tacttttaggc 180
 tacagaaggg atcccaggag acaaaagtgg aatgaataag aaacaaacat cttttgcctc 240
 tggcagtact caaggggcca gaagatgtac ttcaaaaact ttaagacaat tagaatgtca 300
 agtgccacag ggaagagaaa tgataaccag aaatttgtat ttctagctag tactatttaa 360
 cacaacttca caatactaaa acaaatacaa ataagaaagg gttaggtagt tgggcttcat 420
 ttactttttt ctttttcttt ttttttttaa tatctcaaaa aggaagccac tttgcttgat 480
 atcaaaatgc tgtggaaaga aaggagggga aaaaaccccc aatttaatgt ggaatctagt 540
 tattttcc 548

<210> 8418

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8418

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 atttactnac aaaatntaga aaacaagaat ttacctcttt taaatggcat gtctgnatta 180
 cttacaattt gntaaatgag ttcctttcca tacatacctt aagatccaca accttggtgg 240
 cataaataac atgattaaag ggtcaggtac aatgtatatt ttaatatggg atttgtgtan 300
 tgatttagag cataaatatc acacagtga aaatttatca cancctaaat acagtnacac 360
 aggggaanga aagagcttat gtccacattt ccaaggtctt tacaataacg ttatagcgtc 420
 caggtccaac acagcatatn tgcatacaaa agcccactga tgtgaacact tgaaanggae 480
 tctggcctgg aagggccttc atcttggggc aataaagttt gtnncgngtc aaattanttn 540
 caaaagacta 550

<210> 8419

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8419

aggaacagaa aatttattat tatgcaacta gcaagctggg gtcaaagggc tttcccaaaa 60
 aaagtgtgt ttcctatat tacaggtatc aaaacagagc aaaacatcca ggagaaccaa 120
 actgaaactc agaaaagaga caatttctga ggcccaccag atcctgattc cattttgaaa 180
 tactctattg cagtacctct gggtaaata tagctggttg ctaaagacag gatctgaggc 240
 tgggccaatt ctttaaggcac cagctgtctt gaggaggaag atgaagactg tgaatgaagg 300
 acagcagact tgcttctagg aaaataatat atgtaagttg ggatgcctct tgcagccaga 360
 tgtttccgaa taagtcgctc agtaccatac cagttaaaac ctttcgtggc atgtccaata 420
 ccgtggaaga tgaacacttg ctttcttctt ttttgctgct taaaatatct tcttcaaggc 480
 ctcttctaag gcttgcattc ttaatggcng accaggacat tgggaccatc ccnaagcttg 540
 ancccaaan 549

<210> 8420

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8420

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ggagagtctc acttcatcac ccaggttgga atgcagtggt gcaatcttgg ctcaactgnaa   60
cctccatctc ccaagttcaa gcaattctcc tgacttagcc tccaagtag ctgggactac   120
aggcacgtgc caccacgcct ggctaatttt tgnatttttt gtanagacgg ggtttcaccg   180
tgttcgccaa ggtgggtcttg aactccaggc ctcaagtgat ctgccacact cggcctctca   240
aagtgctggg attacaggca tgagccacca cacctggcct ggattagtaa tttcggattt   300
ccaaattcag gtcaagaagt ggaatttatt atgtggnctt tngaaaaaa atataaatgn   360
ggccttttaa atatatttag gttttttttt aaacaaangn tactcaaacc attacctttc   420
tggccccctt gaaaagaaaa aaaaattgnc catnccattg ncttctctaa tttggaaagt   480
ccgaaagact caanggtttt tacttccgnc cttcctgcna nggg                      524

```

<210> 8421

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8421

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agatcaggat ttctttttat tcctcgttgg tttaaaatgg ctaatcagaa taaaaaataa   60
aagggcctct ttgtggaggc tgggatctcc cctatttaga ggtagaacc caggtatccc   120
ctctaccag caccatagtg aggtgggctg aggggtaacc cccaaggac aatcggaggg   180
gcctaggcct gccactcctt ctctctatcc cccgtttttg gcatgtgatg aaaaatattg   240
ctttttggat tcttctctcc tggccttgga ttttaaaatc aagttaactg tgtaagctag   300
gggaggctcc aaggggccag taggagcaca ctctaattcc tctccccaa ggaggggatt   360
atccaatatt gtttgagcta ggccaagtta ttttctgat ctcccaccac caccagtgtc   420
ttgaagtttt gaccctttc ctagggaaac taaatgccaa tgagcctang aaactnaatc   480

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ttcttttcaa ggcctttcct tttgngacca aanttcngac ttaacttttc ccagcttntt 540
ctaatacac 549

<210> 8422

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8422

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cattaacttt ntgctttata caaccatcta gaaactataa aacagnacca cattgngcat 120
ttaacctact tatcaagaag ggaacttcat aagtnataag aattctaccc atataggaag 180
gaaaaaggag acagctaata gcatagtcac agatacaaca tgagtccaag caagcatcaa 240
ttcttcgaca tcaccttttc catttaccag agtggagact gagaaagaga gtgagggaga 300
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ctatagctca gggtttcata gaatagtatc atttgaccaa cacagtgtgg tgganggaga 420
ggggtgaagg aaacacaaat nnaaggatag agtttggacn agaaaaatcc aatttcccct 480
attnccttct aaatactctt catttgggtcc aagcttttgg gctattcagn aaatggcaan 540
aaattatntn t 551

<210> 8423

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8423

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actttcgaca tcgggggctg tcagaggtcg tggacacccc caaccccagc cgggcgctga 120
acaatgtaaa aagaatttgc tctgcaaccc tgtggggggg ggaaataaaa gtaacccagc 180

gtccatttaa tgcagccaag tgcaattcct ttccccacct tagaaagcac caccagataa 240
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 accacattcc cattttgttt gctggataat ttttaataaa gtgaggttta catcactgat 360
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 ttagagaaag catgagaaac agggagcatg tggggtgaag gccgggcaag aattgnaagg 480
 ttgaggcncc ccagnttant tccttgctgn ggaagaccat gcctccgac anggggttn 540
 atgct 545

<210> 8424

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8424

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 taaaagagg gaggtagact cgtagcctc ccaaccttag cttaaactgt gatgttgcca 120
 ggttcctggt ggttcagctg aatcctagac agtttccctt ctctcataa agctgagaag 180
 aaaaaaaaaat tatctccatc taggcccacg ggaattttgt gcatagacag tttgaattgg 240
 tctgaaaagt gtgactagct acctacctat tcacaatgcc tagaaaatgg gctaccagat 300
 atggtagtgg tcaaagcccc gactttcctg tctgaggtag tgggtttgct ctaaggtaga 360
 ccttggcaag gcccctaatt ggtcccgtcc agcaaaagt atgctcgtgt ccctcggctg 420
 tcaagtgaac ctgggtttgn gaatcaactt ttggatang atcattctct tggattaccc 480
 ctaggnttnt gncctacan gggntaccta cctgg 515

<210> 8425

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8425

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acaacagtaa tctttatittt aggccaacat ccagacatac aagacggaga tcaccatgcg   60
gaaccagcct ggcccttaga tgtgtgtgct cgagccagga tcagccggag tctgacagcg  120
cctgcacccc aacacggtcg gattccagga cgccagtgc aaaaccagt catggacaag  180
cagcttccat gcgtgtgcat ttgattttta aaaacaatac atatttcagt gttaacttcc  240
cccctcacct ggcttgaaac attttcccca ttttccaggg aaacaaactc taccaaaaagg  300
tgccgcctgc aggaccccgg gccagcccc ttctggaggt ggtgctgtgt ggactcctct  360
ggggcggacc cggggccagc acagggcccc tttccaggcc gccttcaa at gcagctttgn  420
cactgccgna tctgntgntt aaaaaatcag ntttatgttt aanggcgggn aagg      474

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<210> 8426

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8426

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aaactagaat ttatttggtat acaaaactcc atttcataga taaagtggca catctttgca   60
gcttctattg caccaagtat cgaagattaa aaacacaaaa aaagaaacat ttggttttga  120
aaacactgca aatagccaag tacagtactt tggtaaataa aaaataaaat ggttcagatg  180
aacacaatcc gtggaaagaa acaatctagg gggaaggaac tatggacatc agacaatggt  240
cacaattctc accatcgagc tccatagata aggcaagact tgctaagtct atggatcacg  300
accccatgga ggtcttaagt atctccagac tgaagctaga acaagtatag tgcaattaga  360
aagagagaag gccctctctc cacggataca tccaccctc tgtaaaggag actgacgc at  420
gccaacactt ntacatggga aaggggagcc cccggtgtga cgtctggctc ctggnccitt  480
cttctttcct ctgagcttaa tgctggtgga ggctttgna aaagcactgg ggaaggncca  540
aggncnttn                                     550

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<210> 8427

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8427

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agcagttcac ttcaatggct ggaaactaga cagaaagttg ggaatagtct gactattatc 60
atacttgggg cttgctacat tatcagttct atatgaactt ggaattattg gaaataataa 120
aataaggggc tgtggagggt gatattatta atagtgttat gcagaaaata tgaatggcag 180
ggaggggcag agagaaaaat ccatttcttc atttaaatca aattttaaaa atcttgaacc 240
ttagaatcta aaacttacag taatttaaaa ccaaccaaaa tcacatccta atttttctga 300
gccctttctt ttcatgaaaa attacatatt ataaaacaga agtttggggg gaaaaaatct 360
atgttttacc atacaataag ttgacaaaaa ctgganaaac tagaacaac aaatccaact 420
atgtagtctg aaaacaacaa ggaaaatggc ttattcatta aaacngttta accattcntt 480
taacctggat gancngactt gctggcttta aaancccaac ttggggatta ccaaaaattn 540
ccgttnt 547

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<210> 8428

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8428

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acaatagaaa ctgttttttt atcttgactg ccagagacgc tcctttgcaa tgccttccgg 60
taaccaaat tttgggcaca acacacagct ggccttcatt tcttcagggg ctggtaaaca 120
gaggcattgg ggtcaagtcc agaggggctg gtctccacaa atttgaaga gtagtggggg 180
gaaacagggc tcagggggct ggtggcggca ctgtatgtta tgctgggcat gacggccatg 240
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tgggcaatct cgagctgccg ctttgcacg cccagtgcgg agaacaggtc cagcttgatt 360
atcgtctctg cacttaagct gttctccagg tgctgtgttt tgtcttgcac ggctgaaagg 420
gctgacatta acacctcagt gtccttctca ttttccttat atttccgaac ttctggactt 480

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ttaagtctaa gttctctgat ttggncttct ttcaccttca tgntccatcg ggagcttttt 540
ggcctttggg ttctaagtct t 561

<210> 8429

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8429

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ccttcggtga caaaagggt aggcctctgg tggggagggg gtggcaaaag gtgaagtga 180
attaggagag atgtggggag cagaccagg gctgggagac tgctccttc ccatcacaca 240
tgcccatcaa ggaccccaag aggaaggat tcttcctgcc atggcctggg ctgtccaagt 300
gagcctgact tcccttccaa ggcagctgcc tctagcttca tgtccaattc tcgtgagta 360
gatgaggtcc agggtaggcc cacagttgac caccaaattg tgaananata taagccaagg 420
gagaaagaaa gtgggtttgg aacccccaat cattctccat tttcatccta agctccttaa 480
aactagttca naacttgggg aaagacngca cncagttcta tcctttcggc anactgnntt 540
tcctgcctct gggganggg 559

<210> 8430

<211> 388

<212> DNA

<213> Homo sapiens

<400> 8430

ctgtgaaaac agtgaaattt tattgatgat aactgcgga agacatccat accacaacta 60
agcatgagcg attttagaag catagagaca aaggcacttt caccttgcat tttagatatt 120
tgacaaaaac ttgaaatcag acatattcat agcagtacag aaaaccaatg actaattgtt 180

cacataatca gcatcctata tcctacaaaa tgtagcttc agatattaga acatttgaat 240
 gtctgaaaaa agaaacagat ctaagcatgc agttgtcctc cctgcatttt cacgagtga 300
 caggaaacac attgncacta gctattatca tttgctgngc tgtatgaaag agactnggng 360
 cacctgggng naaacagcag gcanctgg 388

<210> 8431

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8431

gcaaaatgaa acaagtttat tttctccaat aacttctgta aattacaaag acaaantact 60
 aaaaactaca gcatataact tttcaatatt taaccagagt actcgtaata aatatgcatc 120
 cggaacaag ataaaaggct acacctcgtc aggcatccta caaaaatgtc tcaagtttta 180
 tatactctgc ancatttntg tgcgggggca naaggggctg ttgtgtattt tctgaagtgc 240
 tgtgacaaaa ggtcctttca ctttctttg gagcnttttt gaaattgctt aactataatt 300
 aaacaactta agaaaagtaa caccaagctt taaagccatt tttgctttgc tgn cattggt 360
 ccttatccaa tacagatcaa catatcatcc agcacagcca agcacccnct gangccaanc 420
 agccttntgg gacatgggcc ctgtcananc atgccctact tttagttaaa tacttttgna 480
 agagt 485

<210> 8432

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8432

aaaggaaatg cattttatcc cactgcacat tgcaaaagtc tcacgcaaaa aaagctagac 60
 tttcctctat gtatggcatc aaaaggagat aaaaaatgat tggatcaccc agattataaa 120

taaggttatt tgtttctcaa aaatccttat taaaacatta aatcagct cttttgggg 180
 agaaatacat tcatttcagg gagacctcg aagagtgacc atccttttgc tctaccccaa 240
 ccaggtgggg gaggggaagc cccagagggc ccaaggggtc ccctccagtt gagccaggta 300
 gccactcaca tcctgccact gaaggaggtg gctaatacac aatttacaaa tgaaactgca 360
 cgtccattaa attaaaccca atggaaaaca cacgtgtgac ctgtcctgtc attcacagnc 420
 atggggtgag aggggaacccg aggaaaaggg tgcccaccca nggggtcttg gaangtgggt 480
 gggaaggtnt gtgttanggn ggnca 505

<210> 8433

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8433

aacatcttta cattttaatg aaaaagtaga taatctattt gaaaagtaca aactcaattg 60
 caatttcaag aaaaaaatat gtatttatat accataaata agcaaaattg gactctgaag 120
 ccctaatact tcaaaagcat tcacctatt ccataaaaac ctagtattat tcagcaacag 180
 tactactact gattttaaaa tagaaagcaa gtctatcttc acatgtagtt ctttgtcttt 240
 aatttgtaca actcaccaag gttattttca ttcttagcac ccggggttca ccagggtgtg 300
 atccaaagca aaccagcata ggtttttaac agaaaatctt tgccaggaac ttcatgacct 360
 gtattttcct cacctaggaa gaagctgtcc ccactcgcat gattttgaac agtgtgttga 420
 tgttattgct tcgaattgca tcccgacaag cagtgatcac ctggttcttt tggttttcca 480
 accgcagac gaactgctct ttgaattgct tggattactg ntttganggt tnccaacang 540
 ttttgggg 548

<210> 8434

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8434

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cttcattaac cctttattac aagtcacgct cttatagaag tatatgtgga cttacgtgaa 60
aaaatcaaat gtatccaaga ataaaaaaca cagcacataa agtagtatat gcattccagt 120
gttcgcgcca gagacggcgg gcgccaagt aaaagctctt ctaaacggc ctgactgggg 180
caggccgggt gcgaacggtt ccgggcctca ggcacagtgt ggggccgcct gcctcctccg 240
cgccccggcg ggcgggggca gcaccagctc ctagggcctc cgggccagcg gcggaccca 300
ggccggccca agcccgacgc caggcagaac cttttgggcg gggccgtatc tggccctccg 360
gggacggcag tgacgacacc cccagaaatg tgggcttagg gctggccaca gggtaccctc 420
agaagccgc aagcttaatc gggctttttt aaggaagatc tcgctcagaa tcaccacac 480
aggggaagtc cgtctggatc gaaaaggcca atgctttcca aagggccnaa ggctggggtc 540
caccttttc 550

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<210> 8435

<211> 179

<212> DNA

<213> Homo sapiens

<400> 8435

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aattatacag atattttaat tgtatatata tcaggtacac ggaataaaag tcctactctc 60
tagaacatga gaagtcaata aatagaaaag atatacaaag tggaatgaac ataaaaatga 120
ctaagcatgt gatcttcaca ttcatacagn ntntcaacta atctttnnca atnaaaang 179

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<210> 8436

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8436

ctagtgaggg tttatitttaa tcatcagtaa aataaacagc agacgaaaaa aagattagta 60
 attaaaacgg agtgtttcca ttctttactc ttttaagcatt atccatgcac ttctcactga 120
 gctcacccat ttgttgaaaa aggagacaaa gccatatccc ttagactttc ctgttgccat 180
 gtcttttacc actcgggcat ctctgaaatc agaaacaatc agaagtttag gtttgcaaac 240
 tatcctctgg atatcaaata agaatttcac acacaactca ttctcatgtt tcaccttcat 300
 taaagtgaac ctttaatgca aattcacctt ttattctaca aaatttatca tgtattagga 360
 aatgaggctt aattttatag acatgcaa at caataactta agtatatatg tatatttata 420
 ttgtacagaa attgcctctc tcttcaaaaa acttttttaa cttttaaata ttaagcatgg 480
 tgaaagcagc tactccatga actacttanc ctttattaag gtcncaggcc attingatgaa 540
 agggtttctt taaccengc 559

<210> 8437

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8437

atagtttgt gcaattta at gaacacaatt aattttacca ccattttaca taaaaggaaa 60
 ctgaagtga tttcttaggg tcccactgta agttgagggc ttgagattcc aagaaaagtc 120
 ttatttcaga gctcagtgtc ttgccccaaa cgcagcctca ctgctcaatc acattcttga 180
 ggtttgattg gctgaacgca cgtggaacat caggttcatg tttccaagca agaatcatgg 240
 gttggggaag gcaagtgttt actgtggtcc agctgaggac tgtggtgtct gaaactttgt 300
 cacatgggag gctacaggcc cggggctggc ttggctcccg tgaaaacact gcagcgggca 360
 gccagtccgg aaggcagcat ctggcagggc cttcaggcct tctgagtaag gaagacccca 420
 gctttgcaa agacatagag gcagcactgt gactggactg aatagcncac ctntntaacc 480
 ctntntcaag gcaaangggc canaanccag gtggaaatgg ggc 523

<210> 8438

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8438

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gggggaagca caagctttat tggctgaaag ttcttctcag gagcctggtc tgctgggact   60
gcatgttcct ggatgggctc cccagggcct aagctccagg tttcctctgg ccttccgaag  120
gattttgtgg gttacgacca attgatcaaa gatgactttt tcctggcgct tgctcagctg  180
caaaagcttc atggtgtttt gcaacttctt ttcttgttca aacaattttt tatgtagttt  240
ggtgacctct gccttcattt ctccaatctg ctcacagtga agggggcact ggccatcctc  300
ggggagtgag actctccaga gaagcttcag ccgcctgtag gcctcttcca ggggtcaagct  360
tggccgtgct cacactgctc acaaacttgc tcantgggtg tgggtgtgga ccctttgttc  420
ccagctcttg acttgtggaa ctgggagcct cttgggtttg aatggccatt tcancaagga  480
gccctctgtc cttgctgaac tggttgagca nggcctataa gncctaata gncaggaca  540
tgnggcatt ntnttgcc                                     559

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<210> 8439

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8439

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ctgtatatat ttcaagtga tcatTTaatg tgagtgaggc tcagttagn gttaccataa   60
gtattaacag aagaaaaagg gaaagcaca acattttccc tctaccagaa aagggtctga  120
tgtaagataa actagcctgt tggtttaaca atagctcatt aaaaaggcca gagaatctgg  180
gagaagatgt acttgaagc actgtcctnt gagggcccat tccaaggga cagcaaaata  240
ctgaaaaaaa ttaactggct caaaaattat attgagagat aaaaagagtt agtcacagct  300
tagaaaaaaa ttccagaata aatgacacta gctagattag taattctgat gtttcttgt  360
catagtactc tgtgcgaaac agagggacta caaactgggtg cccctttgaa cagagtgggt  420
ttaaataata gattctccag tgcccaactg natttcaagt ataattctgg gatttgnacc  480

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tagaaatccc ganaaaaaagc cccangggga aagggaaggt tttggcctt aaaggattgg 540
c 541

<210> 8440

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8440

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aacactatct tcaaaatagg ttttgaccc ctaaaaatga aaattcttag tgacaagctt 120
tagatatgaa acttagccca gtgggtattc actttgtcac aaaaagcaac tacagacaaa 180
tagtttttcc ctctccccga cacaaaaact gaaattacag acttttaaag cagaaaaaat 240
tttctccaaa atgcaaata ttaaggtcca aggaacaaat gaacagaaga tctcaattat 300
tcaattgagc gaggatatta gtttgcata taactccttt tcttactact tctgatata 360
tgattctggc aatatttata ttgnatctac tgggcaagac actgggaaca caaaggaaat 420
tttagacaag gtccantggt atgctggtaa aggttaacaa ctagcttntt aagggaagg 480
aggnccttac ttatagcatt ctatgggga atcctccaan tgccgcagat ttcagctngc 540
aacaatttgg cactgngtn 559

<210> 8441

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8441

cagctttcca acccagctca tggagcttta ttcagacggg agtgacaaca tctgcttcg 60
ttcttgctgc ccttgaagg gcaggcccta ctgagccata ttccttagaa acccaatgcc 120
gaaggcccat gtttgacctc ccactttatt caagtcgcct aggactaggg ctggggcctt 180

cctagaagcc cccnttcana acctgttctc acccaccac cactcccgtt gtcaggccca 240
 gggaggaccc atgaatgaca aaaatcatgt agggatatc cctggactgg gaatcccctg 300
 ccagcttcaa ggacatatca tctgacacag ggagaagctg acatctgtca tattcttctg 360
 cctcacgtac acacacacac acacacacac gcatacgcac tcttangctt tcaagaagga 420
 agtgatgtgg canaatgacc gntggcacgt ggtnaccact tcttggaag gatcccttga 480
 aaaatgacct tgcccaaggg gccctnaanc atnggttgcc acaaattgnc ccatgggcca 540
 actttttgac cctttttttt gg 562

<210> 8442

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8442

gagtgaata ttttattgaa aatagttaat ttaaaatata tacatcattt ttcaaaagcc 60
 atgtgactga taaaaatata aaactttcca tacaagcatc atctcagctt catcccctcg 120
 gcaaagtgtc tcccgaatct ttccagatgg acatttcgtt tgagtctcta gcgccctctg 180
 gtgaaacacc atgaaattgc ccaaaaacgt aattcaggct ctgctcagga cggaagggtga 240
 aatagcagaa tgagcgccta tttcaatgtg acaggttgtg atgtgctgcc ttctccccga 300
 gctcaggaga aaggcagcct ctgtgagtgc ttctctctct ttagggaaag tattcttccc 360
 atggacactc agccaagctt attgcaaat accttcttcc taagttttca gcactactgc 420
 cttctgaaaa aacaaaaacc ggcaatcaga caggataaat aatgaaagcc tccaatcatt 480
 caggaccagg nccctactcc tggcaaaggt taaagggccg cnaaaatggt taaaccaggc 540
 tgngtttcct 550

<210> 8443

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8443

gcaaaataca tgtgttttgt aaaagaaatc tgcactgtgc ttggtttata ctacataatt 60
 ataagtaagc aaaatagtat gacttctttt gactaatcta ctcctaaagc cttgagttgc 120
 cgttcaatct cttcatctga gattgtagcc tttgaagtag aggcatgg taagcttcga 180
 gcagctgatg gagctttggc catctttcca gaaatttcaa ttccaatttc atcaagaact 240
 tgattcacia tatectggct ttcttcttcg tcatcagaac cgtcaaagat gtcataaagt 300
 gtatcattga ctaggggata tgggagaagg agcaaagcag ttactttcaa acaaacttca 360
 ggtagactt acatattttac agctagccca actatttttg atattaccag aaggcaaact 420
 cagtgancaa actaaaaaat ccttcaaaag tcagtgaagt aaatgggtta tcctattgag 480
 ccnttnaatc tggaataatg gtcatttcac cccaantatc ttatngcaac aggctactct 540
 tttttaaaaa ttaatctaatt 560

<210> 8444

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8444

caaataaaat ataaaatgat ttattccaaa gccataccca aaacatacaa tgaaatacat 60
 ccctgttaaa gacttaataa aaagagcaat ctttacattt tacaatttga agaccttctg 120
 ttcccacaaa aagtctcata aaattccata aagngtcaaa tgtattttcc tgtttatata 180
 aaatgtattc tctcttcaaa tatagccgtt ttattatgaa attgttctca atttctgaaa 240
 ttctcagtag tctatagtat cccattttca catgcttctt aaaatgaggt aagaagacaa 300
 acggtgaaac ttttttcaga tcattttttc agaagtcaat gccttgctga tgcaaagcgc 360
 aacatgcttt tgtcatccct ttcattctgaa atattttccc agnggttact cagtattttg 420
 cncacaaaaa cagttccaat acctggccnc ttaaaaatcc ataccaggtg gaaatcttct 480
 tatgggattt aanggtctga atcaagnctt tggtnaggg atcactattt cttacnggtt 540
 ttaataana tcccn 555

<210> 8445

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8445

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gaaggaaagg aactttaatg agaaatcaaa acacagggaa ccaaagtgca aatcatccac   60
ccccatggg ggggccatcc tgaacccac atcaaccctt cagccccctt caggccccca  120
gcgcaggccc agggcctgga gcttctgcct caggtagctc ttgagctggg gcaggcctct  180
ctgggactcc agttcctcga agggtagctg tggggagagg agagggcggc aggttaccg  240
caggctggga gtgaggatgc gccacgggcc aggccagggc cactcaccgg caggagctgg  300
tagcccatca ggcctaggtg ccgctccctc agggccctcg agcccagcag cacccgccg  360
tcccggcaga aatgccagcg tccccgaac accagcacca cccttgagg ggganggacg  420
tggctcaagg cattgcnggc aangtgggca agggttncct aacctgtctc nttacctnt  480
ggcaaggtct cagtatgcct ngagggaactg gcctttggca agacttgttg tttgcaggaa  540
gggtctggtc ctac                                     554
    
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<210> 8446

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8446

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cagatgtaaa atctgtgcta ttatttgaag tacagaattt agaatatatt cttaaaaata   60
caattaacac atcccactt ttctatgcta aaaaataaag aagactgtaa tacagagatg  120
ccttgattcc aagtatcca cttactttcc acaacaaaaa gttttgttcc agttttcata  180
aagctctaaa tcttttgagg aaacactagg tcgcacagtt ctaaaagcat tttcaaaatc  240
aatgtaagct atgggtcgaa cttgatccgg tgttatggta gcaatgtcag cagtttgtaa  300
    
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actgcgaata ggaccaagag aagccccct gcaaagctgt gtcattgtctg ctcctgaaaa 360
 cgcattcagac tgctgnacaa tctgggtcaat ttctttcttca ctgnggcaac actgntcttt 420
 tggacattag attaattact atctgggtcc tggctgaagc ttntgggang ggaatntaaa 480
 gcccttttac caatcttntt cggcaggcct natnaattct tggggccgat tgggtggtnc 540

<210> 8447

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8447

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 tggggctaca ggcgcccgcc accacgcccga gctaattttc tgtatttttt tagtagagac 180
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 gncccaaaag cgtggnnttg ggttaccaa tgccttcaag gnaaaggcca nantgnact 480
 tgacgggaca atcactgtgt gtggggggac ccatgtcggg tgggaggcct ggangggnt 540
 tgcctccttg gag 553

<210> 8448

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8448

gaaaaatcat tttagaagg caaagttcca aacagggtta cacaggagtc tactcagttt 60

cctggccata caggattaac gctgtgcctt acgttagagc aacaaacttg actgtccgtg 120
 tatatatagg tgagggacaa agggtttctg cagccaagca ctgcactcta ttccgctgcc 180
 tgggcggggc ttgagcagga aggtccctct tgcaccacct cctccacttc agttcagctc 240
 tctcatgtct tccaccaaga ggacatggtc tttttccaca cagatcacat gggatgggtga 300
 atcttcttac tcatgaaaaa cagcccaagg tactgctaata ttgggacgtt ttattttattg 360
 gaaaggttct ttcaaggga cttttctgca agaccaagca atgtatgtat ttttcttttg 420
 naaattacaa gttacattgg gacccaaaac acatggngac taatgnactt tgcttctagg 480
 ccaatttaaa gaaaagtntt tnatcctcac aaatccagng aanccttattt attctaaaaa 540
 gttaaggagn 550

<210> 8449

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8449

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 gccgcacagg gaagcgggtgc ctcggggagc agcctttcct ctgatggcgg gaggggtcaa 120
 gggatgcagg agatccacgg cagcacacgc agcctgcagg cgcagcacac aggcagagca 180
 ctgcccagca gctggaacat gagaatgagg gccacaccac ccagctgcag cacaagccca 240
 gcacggcgtg tcacggcacc tggcaccacc agaccagaa tggcctgtgc gagaggcgca 300
 cgccactgac gtggctatgc tgtgatcaaa gcccgacacg ccggaagaag agccgcagac 360
 attgtgggtt gcacacactt gcaggggaac tgtggaaaac cctgatnggg tccctgagcc 420
 cttgaagttg cccaaggac cgnacaagan gcaactgaag gccaaagtga aaacccttag 480
 cncatgtngg caccacaactt ncttgcttca cangatgtta ggaagcccaa actttcttgg 540
 ngngttagga caaaaaaggc cccctn 566

<210> 8450

<211> 483

<212> DNA

<213> Homo sapiens

<400> 8450

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aataataaaa tacaatttat taaaggantc atgtttacat agatacagaa catcttggat 60
ntttcaacac catagcaaca canaatnaat ttcttcatgt ntaaaagatg tgctgaaagc 120
tgcatgcctc atcantttnt attttattgg ttatggctat agttgacatn tttccatata 180
aaaacaaact gcacagcadc acatatagag tacagacatc ttaagttcat tcacaaagtt 240
aatttttcta aactgccctt caaaaattta catctttgct caattctaaa cattcaacaa 300
aattagcttn ccaagaaaca naaatgatac ccaatttctt tgcttttcta gaagtaactt 360
tccatttgnt catgtatttt gatatggtna tattccccac ccganttaaa ccctttggtt 420
aaaagagcaa cctacttttag ggtcaggcta aaaattaagn gtactanatt ttggnnngtt 480
ttt 483
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<210> 8451

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8451

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cacaaactat ggcattttat ttcagagcct ttgcttacat ttgtncataa tattacataa 60
ttcttcattg ttgacagatc ctaatatata ctttatagct tttattctat aagctttttt 120
cttcaacatt ttgtgtcaa caaatcttta cagtcctgta caaatttgaa taacttgaaa 180
ccattttcaa caaaattagt tactgtaagc acacactaca agactgaaaa tgcttttctt 240
agaaaagttg aatgtaaagg attctgacac gttagcatct acaacaaaac gcattgaaat 300
tcccacgtcg tattgccagg aaacaaagaa aacatgccag ccccatccaa aaaaagtnca 360
cagaactaca attaaaacag taaaacagtc tgtcaataaa gtctggggat taacagggcc 420
cgatnttaaa tagcttggat ggacncatcc ccatttccaa aggnntccaa nggggaaaaan 480
ttaatccann gcccaacc 497
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<210> 8452

<211> 417

<212> DNA

<213> Homo sapiens

<400> 8452

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caataagtgg taacttttat taccaccata tgtaattatt gatttttcac agtttttaaat   60
acagaaacag aatgatacaa tcttcttgat tccttcccca gcacccctcc aatcctgggtg  120
tctgtagagt atagggtggt aagagggttc agaaaccacc ccagcccaga cctggaggag   180
aagctgtgat gacttctctt cattagctga acctacattt attcttgtgg ctggccctcc  240
actgaggtct gtcttggaac tcctgatgag attcctgcct tgcccactgc ctgcagggtcc  300
tagccagcaa cccagtcctt gtgtggcatg ggcttcctgc tgctggatcc ccggctccac   360
tgcacacca ccacacctcc ccagngnta cctnccnttt ccnggactgn tnactat    417
    
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<210> 8453

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8453

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ggggagtagg ttttacttgc agtacagatt cttttcatta cagatcacia aaatacaata   60
caatgtgaca agcccagttt aagaattacg tgcagtagct catattaaca caaacagctc  120
cccacgaagg ccgacaagag cttaatccgg tgtcaacagg gttcattgca ggagtagaat   180
aatccggtac aaggaacgag aacagattga aaccagaaac aaagccatgc ctgacagtca  240
atcaagggtca atctgatcat ttccatgacc aattacccat gtgaacaatt caaaatgacg  300
gtggaagagc tgagcaccct gtactcacac acgatgcccc cagcttggca aaaggtacac   360
aaacacttgt ttgaaaagaa tgactgaaac gtctactttc aaagaacaat ggacactttt  420
aaagggaatg ctgacattaa cttttccaaa atggaanttt aaaatgtnag tagtactctt   480
    
```

ggggaagaat ttgcctggaa ccgtaacctt gatttcccag nggtttaatt aacnggggtt 540
ttaaatttaa actnttc 557

<210> 8454

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8454

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gtctacaagc attttgaaat attctgtgcc ttcggcagaa tttcgtgtgt gatcactgag 180
gactgaatcc aaatgccttg ctgcttttaa tgtttcttct gcaagacctt cttcttttac 240
tagttcttca aaatttacia tatcttcaag atcaggaaca aatctaattg cattgctgct 300
acaatgaaga ccaccagatc ttatcattcg tacatagccc atagcattac caatctggct 360
gatgagttgc ctgaattgat caaggtagct ctgtccctca ngtgttattc caagttttct 420
gatgcctcga ttgaattttt ctgctctatc aaaanggata cttatgatca ttttggggcc 480
ttaaatttnc tggaaaaatc gaatatcntt natcaatccn ggatttgatg gggatcatcat 540
ncctnaaatg gctaa 555

<210> 8455

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8455

gttctgattt tgacaagggt aacttcttct ttattaaagc aaataactgg acataatctt 60
aaaggattcc acctccatcg tctttcctaa cttagatctt cattgagaaa ttgggcaagg 120
ttaagtttac ttttttctag tgctgcgggt ttggctcgtc ttggtagtct catcttcatt 180

tctgattctg gttctggaac ttcattgatca ctttcagagt cggcttcagc agtctgacac 240
 ctctgtttcg tcctagctga aactgtcact tttctctgtc ctctgttagt ctttagctga 300
 gtagactttg atgcttgggt tgcttttaca cccctgagtg gagtcatata tacttcttta 360
 ttcttttcat cttcattttg gaaagtaagt tgtagtcaag gtggcatcct gtgctgcttc 420
 agcttgggtca ccaaattctt tattnccttt tctaactgaa tcttgaattt cttccaaagc 480
 tnttaagaca tgcctaact tttacttgct tccanaatct cattcaattn ganccggagg 540
 atct 544

<210> 8456

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8456

ggaattacag ggtcacattt taattcctga attttacagt ttagcattaa taccaccaca 60
 tgtatacaaa tgggtgtaaaa caagtacagt ggtatttttt aatacaaaat aaacatctgt 120
 tttatggaaa aaactatact tcatacttac acagacagct catcttttcc aaacaatagc 180
 caaaattaaa attaactaca aaatctccag aacaggggaa actgcttttag attaaacgat 240
 tccaggaaaa atggaccctg aacacattac aagggtgatc taaagattgt ggctggaatt 300
 actgttaaag tttttttttc ccaatgcatt aaattgtatt ttggggagat ttttctcact 360
 tcggcatgat ctcatgatc agatgagcaa actaacatta aaatatttac agttaacttg 420
 ttgctctaaa aataaaactt aactggttgc ctcaatttat ttttnaaatt cacttaccgt 480
 atattggaat gngcctttac tctttttaa aaaaccgggt ttatntttcc ncccttg 537

<210> 8457

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8457

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acttttcaat tttattgtat aacttttcat taaagtgaga aagccattat attcataaga 60
caaacacagt atcaaagaag ttaaagtcac taggtaatga aataacaatc atctcaaatt 120
tggatgcaca tgctcaataa ctttttctct cagcctaaat gccttattga cagggaagaa 180
ttatatgaga ggaaaacaaa gtggcaagaa aactgcactg gccctcagg acaaaaactc 240
atcagggaag gattcaaatg ttttaaagtt ctgcaaaagc aatatgaaa accaaagtcc 300
agcattgggg gcggttaaag gtgggtttgt gaataggaag aaaggctgga agtttcagct 360
cccttacaga gtacctgga aaaagacact gattagtaac tacatgagct aaattctcct 420
ttagcatctc ttaagtatta attctctgca aatatttgga ttacaatatt tccaattgct 480
tccttgggaa aaaaatttgg ggngancnt ttcaattttc caaacngggg aanttcccaa 540
ancccttgg 550
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<210> 8458

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8458

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ccttcatgca ttttatgagg aagtcttgga ttaaaatcat ggtcaaccag atgttgcttt 60
tgcctgggaa gatggtgtca tattctgttg cagagtcac agtgcccatg atagataact 120
ccttaaattt ttagtttctt tgtggtctca agtctttttt tcagcagctc cccatttcc 180
agaagtgagt gcagataact gctctgcacc ttccttgca cagtcttga aaattttctc 240
tcttccggtg agagagaagt gtcttctaaa ataagttctt caagttaag tgcaattaga 300
tgtgtttcaa gccctttaat atgatccaca acattggaaa ttaaagtctg aagcccagta 360
acatagtctt ggaaactggt aaagacaggt ggcatgatga tgctggttcc ttttctcct 420
tttcttttctc tggaatttta ntttgggatn ggccnaggga acttttacag taccnggatc 480
cccaanggt anccggaatt ggtntaacca a 511
```

<210> 8459

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8459

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attgtcaatc tttacaatTT tattgtaaat catagtgtga gatacagctg caaatatagg 60
gaagtaagtt cacaaactgt ttttttctaa agctaaagct aacattaggc cttgctatgg 120
tagaactctt cactgggttg tttcttaaaa aaaattcacg caactgacag gaggaattgt 180
ctttattctt gcattaatga taaatgtaat ctacaagatg gccttcatgg attagaaaaa 240
ggaatcagac cacaaggaaa aagaaattgc tggttttcac tcaagattta tctagaaaag 300
tgtactgact actggaataa tagtttacct ctgggttgta ccacagaatg agaaattcta 360
caagattata caactctttt tctacaagat tcactactca tattggtttt attccattnc 420
ggaattagga aattaacttt ctaaatatca ttttttttct ccaaaaaaat ccttttacca 480
gctacctgga tatggccaaa aatatcttga tgctgtaaag gtctatctcc ctagtaaaaa 540
tgaataaa 548
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<210> 8460

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8460

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aaagctctga gcacgtgatt gctagtTTaa ttcaactgtt acacccatt ctgccttgta 60
aaaataacaa aacgctccta tcaaaatgac attgtgatgt gactacaggc tttttgtttt 120
ggtacagctc taaaaaatgt tggcaccgaa tgcacttaag aaaagtgtta aggcttaata 180
caaatacaga gacgagtcatt ttctcaatgc agcttagagg gtgagaacag gatgctaggt 240
ttttaaatct tccaaatata ggagtcctcc aacgtacaga catacaggac acctcccaaa 300
tgtaaacgac agccacacag cagggttgc atgcgcagga actcttcttc tcccagttag 360
cagactaagc actcttgaat cccacccac tggctcgcag agggaaagaa ggcaggacag 420
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atgccangaa gaagtaatgt cangggcttc atacaagttg ccaagggctt ntgctgnagt 480
catattttcc tcattcccat ctctgggttc tnccataacc canaagtccc tgnccaggggc 540
ggaagtaaaa a 551

<210> 8461

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8461

gagtttcaaa tggagtatgt tattcacatg ttagttatca ttttaacaca cacacaaaca 60
ctgacacact ctggtttgcg tggaacaagg gtggtctaaa taccctaaaa gaaaatgaaa 120
aattaaagta cattaatgtt tcattactgt aggcaattac gtccacatca cttacaaagc 180
tattactgat attgtccaag gaagcagagt ggtacagagg aaggaaactt gagggtaaat 240
tcatcagtga cataacagat ctcaacatga gaaagctgac aaaacatgaa tttttgctgt 300
gaaatttctc tttgcaaaat atgaagaaaa gtcaatcaat gggcagtaaa taagaagtag 360
gtggtgaact tttgctgtca attctcctca cagtatcttg cagaaggcat caaggaaaaa 420
ttgcttagnc ctttttttgg gaccaatttc agaacttttc caattgcaat gggcttaccc 480
tcatctcttt aaagtaaaac cgaccatttt ggggaaaatc ttttgaacgt ntcgagggca 540
aatgggtcct gntggcctta a 561

<210> 8462

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8462

catgattcaa cactgatcag tgtttaccac tggataaatc tgagttcaca ctttccttct 60
ctgacctaaa tgtgaagtca ggaaacacat gtgccctact tccatcctga gctcagtcac 120

caatctccca ccagcctcag gcccctccac ttctcagatc aggtcccaga cctgcccattg 180
 aaaatgggga gcaggctgta acagatttgt ccacatgttc ctaccacctg tcccaaccca 240
 gggtagccac ccagagacat ctggtatcat ttaacaaaca cattgaagga caactgggtct 300
 tcagagctga agagagctcc tagggggaga agctgggaca acagtgaat aagtagcagc 360
 agcaacgaca gaagtgaatg gtgacaaaga ctgctgtgat gagcaggtag cctatcaggg 420
 tgagcttcac aagccgagcg agtntcagga tctgagaacc aaggttgggt aatgnccatg 480
 agatgtcaca cccagccgga agccagnact tgcacaccn gcttcagcaa tagtanatgc 540
 cccggca 547

<210> 8463

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8463

ggttcttccc aaccatctta cgacgttta ttactgtgat ttcagagaag aaacaggctt 60
 acagaggtta agggcttgag accactcaac tggttttaag tggaatccag accagagggtg 120
 ccggctccac gtctactgcc ctttccacgg tgccatgctg cctcccacaa aacatccaca 180
 gtgcccttgg ccaatgaggg gccgccatcg gaggtcacag gaagcctttt cacagtcctt 240
 ctggggcatg agtggggagc agctcttctc cccagagctt taaagcccca tcgaggaagg 300
 ggtgagaact gacctctga agtggccgag tgtgtgtgta ccgggagagt ggactcaatt 360
 tttatttttg aaacctcatg cacagagttc cttatattcc ccagggtcca caagaagtac 420
 caggtgccat ttaanaaccc ctntnaacc ntggccanc cctgnaagca acacgggcct 480
 ttacaggctg gcttnttctt ttggcacaca agcctttcgt tccatggaga atc 533

<210> 8464

<211> 396

<212> DNA

<213> Homo sapiens

<400> 8464

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acttgggttg cctttattta acattctaaa gaatgattat taaaagtcaa ggaccatatt 60
tagatctttc ctaacaaaga agaaataatg cttgttccat aagtaagcca aaaattttct 120
ctggttaatc aggtaactcc caagctagta agaacttctt ctgggactct ttatccactt 180
ttctacagga aacagaacta ctgcaggcaa gggtagcttt atcttattgc ataagtatgc 240
aatatttgc taaacaagat cagaaaactc actaaatgag tagaatgggtg agatgagaac 300
atccttagat acattaagag ctaaacagga tgcaaatcag aaaacaattt cacttaaggn 360
ttgcttggca tctttnacat tagcctttnn tgnanc 396
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<210> 8465

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8465

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caggatatga atacagttaa ttacagtttt cagactccca ttacgacaca tatctaaagc 60
tgaacattgc aaactgacct tactagcagc aattctccct agacaggaag ggtttcagtt 120
aatttagcaa ttaggagtaa agacaaactt acaagtcatt gtttttcttg tagcagctgg 180
tatatgagca gtgaaactat agatacgtag agtcattcag gtttagcctt gtctaaaaaa 240
acattaataa gttatgggtgc agaggagtat cccaggggtt gccaaagaga aggctgatgt 300
ctttagatgt cagtatgaaa caagcaaactc actttcaaga catggcttac tatttgcttt 360
actgtcagga caacagaaaa agaagtgggc agctacccta gattctagct cacacataat 420
tcagccngat aatcatcatt taaataatac cccttggaat ttttcagact tttcacaggg 480
tcttaaaaacn ccaccatcng acntaacatc cacattgttc caaaggacta aaatcaaaag 540
catttgca 548
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<210> 8466

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8466

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agaaaaggtg gaaatggcct tttatttaaa tatgaggaaa aaattagaat taagtacagt   60
aagattatTT ttaaaaaagc agacaagtta gaacaaacat tttattatta aaataaactt  120
ttgtataaaa gcattacaga tcaaaagctg tatttacact tatcgattca aggtccaatt  180
atgcatcaaa cattgaatgg cacagcaatg gtttacatat gcaagtaaat tggacataca  240
aacacttaga ttccacctct accaaatacc ttgattaatg caaagaggag ggggaatact  300
gacacaggaa acctgcccag aaactagact ggcagagatg tcaggttaac aaactgctaa  360
aagttacatc ttcaaaaagg cacttatcat tgntataaaa gtgcttaaaa tctaaacttg  420
aaccttgngc ctggnttata aattaccaga aactgcaagn acccagacta gttttaatat  480
caagttccat ccaaaatggc cagaatttat tgcatacctt catgtgacng gaataacttg  540
g                                                                                   541

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<210> 8467

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8467

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gctagtttag tgtttgcat ttttttaaaa atacacaaaa tagaaatTTT tacatcaaag   60
tgtgataacc tcacttacac attgttccat acttacctgg tttgtttgc atctttctgc  120
aaacattaaa aggagatgga ttgattctg atttttttgc tatggttcat gtaaacagtt  180
gagactgcta cataaagtag gttgttgtca aaggtgaagt ggccacagaa tccaagaat  240
agaataattc aatttggttt aatgaaattg gtggaggtct tagcagatag ataatccaag  300
actaaatatt gtcttctagg catttttaaaa attaagaact ttgaggTTTT cttcatgttg  360
taaacataac ttagaccttg gtggcattaa gtttaccaaa gaaaatatta aacctgatt  420
ttatcatcct ggcccatgtc agtatcacac tctttattat gagaatgaaa nccaantaat  480

```

aagccaaatc catcaggaat tcaaattgnc tggcaaagaa ggtcccactg g 531

<210> 8468

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8468

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agtttctgat tctcctggga tcaaaggtaa aagcattgta tggaaacact caaccttggc 120
tcattaccct cctgaggagc taagtctgga ggcctcagag agaggagct gacattcaca 180
acttattcca agatgggtaa cacagtgaac aaagaattag taaaacatag actcagtctg 240
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attggtttcc ttgtgatttg taattaacgt acaaattata aagatgttgc aacttgctga 360
tttcccttc ttnagcccc ctctctccc aacentaat accattccaa anggcangng 420
gatcctaana atttttggtg gtgnaaatat ttigtgttt 459

<210> 8469

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8469

cacattaataa aataggttt aatgcaggtg ggtcatggca tgacgaattt cacaggcacc 60
ggggacagca ggcggccagg tgctcanagg gcaccaaggt gccacaactc cctgcagcgt 120
tgacaccgca cgagcggcac caccagcccc ctccgcctc cgtcccacc ttcaccctna 180
gccaanaggc ttgggtgact ctgagtaata cgtaacaaa aaacaaagct tntttgagga 240
aacagcatga cttagtcaa aagattctnt gcagcaagaa atgaggccca cgcagggaag 300
ctcccgcta cctgcccagg gcgtggacgc agccggggt catcagaggt catccacaga 360

agctgccgat naattannag agccccggtt acggccagaa aatttttgct ttctctacct 420
gatttaaggg ttttcaaaaa gtttctcttc cattgggaca caaatggtno tnntggnttc 480
tggggccact tgttccgcct gacaggggta angtcncag gtccaacat tgccanaag 540
tgtgg 545

<210> 8470

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8470

gaactttgac gagcattttt tattgaacag ttttattctg ttttagaata aaaactttgc 60
tttaatatg taaggggtac tgcaggtatg ccatgctgcc agttattgct ggggcacaaa 120
acgccccagt cagtgattcg gagggctggg aaaacgcata aactcataat ttcagagcaa 180
gtagaactag tatttacagt tttctttctt gaaattggcc cgggacatct ccaacagtct 240
acacatgtat tgccatggta cttgctctga tgctctgaat gcctcggaac tgtgttcaat 300
atcatgattt gtgggtcctc taaaagggtt tgttggttaac atgcaagcaa acagcactga 360
acaatattgt ctaaactatg gctgccaagt actggatctt cataatgaaa ccaaattacc 420
aaacactggc ttgtagagct atncaaagat ttaaatgaaa ataaaaaatg tcaacagnct 480
taaattattca attctctaca gngcagttct atttttt 517

<210> 8471

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8471

gggcccgtac attatgaaga cattcgggaa aatgaggccc ggcaacttgg tgttgggtat 60
tttgctttg cccgagacaa agagttgaga aacaagcaga tgaaaacctt agagatgctg 120

cgtgaacaga caacagatca gagaacaaaa cgagaaaaca taaaggaaaa gcgaaaggct 180
 atcttagggg caagacttgc caaacttcga caaaaaaaga tgaaaaaatc aaaagaaggt 240
 ggaacagaag aagaaaaatag agatggagat gttattgggc ctttgccacc ggagccagag 300
 gctgtgccaa cccacgtcc tgctgcccag agtagcaaag tagaagtcac tgtccaggag 360
 aggaaggaca ccaagcctgg agtgccacac atccgggagt gggacccgcg ggaaaagaat 420
 tttccttttg gatactgggc gaaaaagcag tcagatctcc gggcttaaaa gaaaatcctt 480
 gagttttgcc ccgccgtcag aatacnttgg ngggtcanaa gaanactggg ttttccaacc 540
 agccaggctt ggnccaaacc tg 562

<210> 8472

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8472

gaatctttta aaattctatt tgagaccag cacacaagaa tacgatagat gtcctcaa 60
 gggggcttgg ctcacaggtg gaaggacact aaattgggtc catctgattt cttgaggcaa 120
 ggggtgaacc tggtttgcac aaatcacacc tgtccaaagc aaccacgagt tctactattt 180
 tgcagccctt gctgctgggc gacgacgacg acctctctgc ctcttcttc caccactaca 240
 tcgcctcctg gggcagcttc tccctactcc accctgtata cctttcccag aatacagaac 300
 ctcaggccaa agagagatgc cagccccatt aatcacctct actgtacccc aatcatatta 360
 cgaaaagtca gaccaggaa aacaaggact taaaaagcca cgcttatagg gcaaaattcc 420
 gnttgctggc ttcaagccct tatttccgcg ttaaatngaa nggctctgga ttatagcccg 480
 cantaaattt anngcctcct aaatatnggt tgt 513

<210> 8473

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8473

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ggttttaaga agtaccaatt taataatgaa tacttagaaa tatggtacac agataccata   60
gtaatataaa atgcatacaa ttttaaatta ttttcttata aactctctac atgaatggct  120
ggcggcttcc aacagataaa cttttggaca aaggtacaag atatttttgg gcattcattt  180
taaataccat ctagttatcc aattaggagg tttctaaaaa aataaatatg acaaatatat  240
ggatttctga agtataaaact gacatacaaa tctatatatt ttcttaatac ttttcattaa  300
agcatcttta aagcattctg taacatgaag ttgagagttc aaattagatg taatgaaaag  360
gcatgaggtt ttattagaac tgtgtaattc acatatcaaa atttttaccn taaaagttaa  420
ccaaccccaa attggaaagc naaatacggg attttactct tccaggtacc aatttcagaa  480
aaactactcc tgggaaaaat taatattccc aattctgnaa ggtaatagga aacnttnt   538

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<210> 8474

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8474

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gtattatgct caaactaagg cattttatta gctggcttta caacttaa ataatcttgg   60
ctttcaaagg aacagcttcc actaattcca aattaaactt tcacaagttt acttgtttgg  120
ggaggggacat tcttatggtc accacaaaat acttttatta taaccttccc caaatctttt  180
cttagcatta actggaaaaa aaaaaaaaaa aaaagcttag gtcaaatatc aactgcctga  240
aaaacccaat taagttactt ttccttaaaa catgtgcagt ataattgaat caaaagagaa  300
aactgcaaat acattgngct ttggccagaa gtagagttca tttcatgatg attcagtatc  360
ttcagatact atttttgaca cttgccataa atcttagcaa agtaaatcca tttattaacg  420
tttcaaaggc aaagttgggt ttaacattag actttctttg gcaactggca acttaaaaaa  480
tttgcanang ngattattna aacctntttg gagctnaatt tagcttttaa   530

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<210> 8475

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8475

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aacaaatcca aagtttaatt attaaggatt acaaatatTT ttagcagtgt agttaggcaa 60
tccaagcctg gacttccact tcattcctac taaactactt gcagagctga ggaggcagga 120
gactagagta cagagagcat tttagtttta tcacaaaggt ctagaactgt ctctacagtc 180
acaggaagaa acaggtatgg caccgtggcc agaagggggg aggtattcac agagagtggg 240
tatcaagggt tcaaactttg tcttctgata gttttccaga gattcctgta gagaagggag 300
cagggagagc ctactatccg aaaccattcc ctgaaccctc tgaattctga agcatgtgga 360
tttctcagtc ttgttctacc catccccctt cccagctttc tgctcctttc cactcacctt 420
tccttcccc tgGCCatttt cttccccatc agagtctaaa accaaagtcc cctatggtaa 480
tgacggactg acagagaccg gaggaccact gtaggaggga accngaata aacttct 537

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<210> 8476

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8476

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cttcaaattg cttttattat acagttgtaa tggatatta tataaacatc aagtctatTT 60
tcacacaaat cgTcacgagt ncacactgat aaagacatgc gctgggtaag agtcattatt 120
ggtacataaa catactggga tttgggcata aaaacacagt atcaattaat agcttttagca 180
gtctcaaaat agacttcaac gacattcata tatatttcct aatttaaatt gtgttagaaa 240
cattgcatct actttgagga acaaattctg taacagaaga gggaagacag gtaggcaaga 300
aggcaggaga tttttagttg tatactaagg tttagttttg gcacattgaa agtatcattt 360
ttcctattag atttctgaat ttgtgaacaa acattaacag ttgtgttct ttaatatgac 420
ctcattcata ctatatttgt gggaaaatac aactttagtt ttttctggtt acttatttnt 480

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ttaattttcc actattgntc antggaagga cttacccaat antttttaga agaaagaa 538

<210> 8477

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8477

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 gataaagacc cactttctgc tccggagggc tggagacagg agggatggag aggctgtgcc 180
 tagactcagt ggggtgatggg aggggcattc tgtcaggaca aggactgggg gaagcaatgt 240
 gtgatctgcc cagaccttcc agatacattt cactttcgag gcttcttttt gcttttggaa 300
 ggggtgtgga agagaggcgt ctggaggaag tgccccgcg gagcctcgag gctgcactgc 360
 ctgtcagtgc ttccacgacg tcattccttt cttcaagtgt gccacttga ggctgtctcaa 420
 agacaactct gncctcttca aaaatatggc ttttccgggn actggaaata atggtttttg 480
 aangntttcc accagggccn aaaatggggg ggctctttgc tgctannggg cctttggg 538

<210> 8478

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8478

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 atagaacatt tcacaattac actcatcttt tacataacat cttgacatcc atttttaaat 180
 tttttgcac aagctccttt tcattcaatt tggtaaagcc agttatacat actaatgtgt 240
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ctaatagtct tggatggtgg ggggaggatg gccacgcaga cttgatgcag gagagggaaa 360
tattctttcc tggggaaaag tgacttagcc caatttttgg tgactgnagc tcaaccctac 420
agtcattgcta gticaaaaaa aaaatttcca aaactaggaa gaaaggtttg gctttttgat 480
cacagtttgn aacngattta anggaccaat ggngcttcat cccccngaaa aaaaattntg 540
gg 542

<210> 8479

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8479

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ttactacaa atgtaccaag aaaagagaag gccagcctcg acctcgctgt ggcacatgag 180
ttatccttca acagggtgtag gcattttgag tcagagaggc ctggacaatg aagagacagc 240
acctcaggca gccttgccag gagccactgg gtttcatcct ggcctgaccc agaaaaatct 300
tatggaagag aacaagaggc ccaagagctc tctgatctgc tgtcaaccag ctgcagccgg 360
gagactgcca aagcgcttgc agtgactagg cagcggccct acagaagccc gctgggaagg 420
ggattaccag cctgatccct tggttttaga agccngaaat ggctcaactt tacaacagca 480
nggnctgnca gggagggggc catgaccctg gaaagggttt ttccccttgt gggg 534

<210> 8480

<211> 487

<212> DNA

<213> Homo sapiens

<400> 8480

agatgaacac cgttttctct tgtttattta aatttgggag ccaaattgga tggagaaggt 60

aatgatggtt ttcaaaatac agtaagtctt catttaacat tgtaataga acaatgaaaa 120
 ctccaacttt tacgtgaaac agtgtatagc cagtcctcaa ataactgcct tttgttcaac 180
 atcctttcct tgtaacaact gatgagaaaa agtatggttt tgttatacat catttctctt 240
 gaagtacaag ttttcaagaa cctattgaca aggttaagtg tgggcttaca gtttaccaat 300
 cttagcctca gattgggcta gggcaggat gacaaaccag gctcttgcac gggctcttta 360
 atggactggg caataaatga agactttggc ctgtaaattc ctaaatagct tctttgcttt 420
 tgncccttan gaatgcacag nctcattgnt acangccatc ttatggtcag tagaatcnaa 480
 cccgaat 487

<210> 8481

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8481

aaattaacca gatctgtctt ttaatagtta ccagaattta gatgttaatt cccagagga 60
 aaaatgtcca tggcacagtt tttctggaaa agttcacatg tagacagtga agcttctgaa 120
 gttaggcgtc aaattagtag tgacaatctt ttttttaatc ttgaaagtcc ctagttttta 180
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240
 caggccaaaa agactctgaa gggaaccagg agggtttggc ccttgctgtg gaaagatgct 300
 actgaaagta taagagaaca ccctaattgca cgcgtcaggc acgaaaccg taccatgccc 360
 cgctaagaca tgggaccaga gaacacgtna acgtcaaggc cggtncanga aaaccattcc 420
 caagaccacn gaagctaccc gaggtcgaca ctgncatgaa aagtgttgct gaaccgcagt 480
 tnccagggct ttactggccg aacatnccta aggcacggtt gggcttgtn 530

<210> 8482

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8482

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cctttcacia aatggatttt tattgtggtc atacatgggt tctcagtgcc acagaaaatt 60
gctatgtagg gacaaaaaat ttttgatgg ctctgtaaag aaacatggta ggttttcaga 120
aatgagttgt gcaggaatgt ggtaaatgaa aagcagaaag ggtaaggga agagaaagga 180
agccaaggag tgtggtatgt acatcaaatg attacttttt aagccctct aggctctgat 240
aaccctttcc ccaagtcaga tccaacaaa attcatcagt aactgaagtg attgtgctaa 300
cagatacata aagactaccg gagaaaagtg ggttgagatg ggctcagact tattgttagg 360
acaactctgg gagtcttgtg tctgtgcaa ccacgtatcc gtgggctacc tggagatgaa 420
gttctaacia cccagcacag aacccaaagc tgntnttcna cacctttggt tantngggga 480
aanccttatn ggggccca 497
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<210> 8483

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8483

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gaaaagtcac cacaatcagt ttaattaagt gcacagaata gcaatcaatc aatcagtcac 60
gtcaataaaa ataaaacaat tatttttaca tcaagtgtgc tttatttcct ccacaggtat 120
tctgttaaat aaagcaccat ttatatactg ccaggccaca gctaaagagg attctttaca 180
gaatcaaatt tcttgtgggt gtccgtata caagtaaact taattttgat aataagaacc 240
acagcgatcg gaggcaatct gcctctataa ggtacaaaac tggcacagag gacaccatat 300
catacacagt aaaaatgctg taagtttaaa ttacattgta cagggttagg caaccctgtt 360
cttcccagac agccatatta aatgaaagcc actaaagtga actcttaatt acataaaaca 420
tatccattat ctggatgccc ntaaggaag tttactggaa atgccagggt tttcatctgg 480
aggtttttgc ttgccccaaa ntaaccctt taaanccttt ntggcc 526
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<210> 8484

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8484

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aaaagaaaaa tgttaagact ttattcaaga tgtgtatcag gcattataac aaaacagcag   60
aacttcaacc tttggaatac tgtaatttta catccctttg atgcacagtc cagtatacta  120
ttttattaca gatcattcta tagggactac agacatgaac tagaggaaat gtgcacagtc  180
acaatccaga atatcagctc tgggagtgtg cactgtttgt tagaggatga agcacatcct  240
ttgccatttc aaatactgtg ccagggtggag gactaggaag gctcaaagat ggtcatgggt  300
gacaagcact cttatcacaac acacatggat agcttatcac ggagaacaca tttcaaaggc  360
cagcaaagtg agcaagctat tcacacaaag ccaggaggga ttatgactaa actctccagt  420
ttataagcac aagtncacat ntcacctctn agaacangng ctcaatggca ttacttaaag  480
gtnttgcntg gac                                                         493

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<210> 8485

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8485

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ctgtttatga cactttattg atgctggggg ggtggggagg agacctggag aaatatgtgg   60
gggcaagagt ccccagggtg ggacagggaag agtggtgaag cctggccact actgggcagg  120
gaagacagag ttgccactgt atgcacaggg gatgagcagc tgccggtact ccaggggcag  180
gtgccgctcc actagcacgt gcagtgagac ttggtcagtg accaggccct gccgccgcat  240
cagcagctcc aggtcctctg gcttcacagt cttgcggcca gcatgagcag caaataacctc  300
cagatcatca caaagatgct ggaaatattt atctaggcac ttctccacca tctcaagagc  360
cttcctctcc atgggcatct tggcatagaa gctaaagagt ttcacatagt gggctcaagt  420
ccaaccttgt ggggatcttt gccngggcct ggggcccgtg gtcccgggcc taaggggatn  480

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ctgaccacaa aaggttttga agctntgaaa ataaaattga gcaccagccc ttgggcttgg 540
ttaanaaact n 551

<210> 8486

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8486

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cggcctcaaa acacttttct ccacttattg gccaaagacac attattactc cctgtttgca 180
agtgaaaaa cagaggcaca gagaggtag tgtttggaca tggtcacaca gccagttaat 240
catatgacca cagaggctgg atctcctgag ttttaactg agctgtcatt cagtccatag 300
ccatttattg tctttcctcc cagccacggc gcctttcctg tgctcgtca tgagcttctg 360
tgttatgaag aatgaagcat caaagggtag tgtatggtta actctggcgt cttcccactt 420
cgggtggctta ttaattctca agggcagnct cataggagag gatattcagg catgccagcn 480
ggtattgggt gnctactggg gtcacttctg gncctttaca ccagcctntg gggaaaagtt 540
cttaccan 549

<210> 8487

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8487

aagtggccac tattttatta ataatgcaca taacatatgc ttatcattaa ctcttaaaaa 60
gattattatt taactataca agaactacca tacaacattt caacatacaa gttcctatac 120
ttcttaagat acacaataat attttgaaag attggaaatg tttccaagg actttcctat 180

cacaaatccc cccagtaaa aattatagga actgtggaat atggctgcta atattctgag 240
 atgaatttag aaagtataag tattgagaga tggactttat tatagcacct gtagaagaac 300
 caaattcagg catttateccc atattttctg aaatatattac aaagctctta taacattttc 360
 aaataacatt taattttacta agttctatatt catggcaaata agaatacaga aaatttgagg 420
 atgctatattt ttaagttttt ccaatacagc ttaagctttt gggataaagc tggttttacta 480
 aaaaggatcc ggtctcaatt gngngngctc ggtctctttg gcaatttaga gccctgggta 540
 agcacatgca 550

<210> 8488

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8488

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 gttctcctta ttcctttcag acaccagtgt ggcgctgaca ttggcagggtg gaggggagct 180
 gccagggagc tgggggggtgg ctgagggtc aggctgcttg ggggtggacct ctctctgggc 240
 cgccaggctt tcagctccat ccctgccctc cagtttctc tccatggctg ccaccaggat 300
 cttgagccac gtgttctcgg taaggagggtt ttctgaggca tcggccagct cctgcagctt 360
 gcggggccagc tcctgcagct cacgtggtct tctgctcata gagggcctgc actgctcact 420
 gtgtgcgtgg agcaagctgt gctggtcttc cangggcccc tgctgctgnc gaacccgggc 480
 tcaanttttc ggcaactggan aacttgggat tcanctgnac ttgggcncct ggaggtggtt 540

<210> 8489

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8489

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tgccttgggg atttatcacc agggaaaaca ctaaagtccc caggctgagc tatccatcca	120
gtgatcagat gaccagcct gtgatctctt aagaacctac atctacacat ggcagcctgt	180
tagtggcttc tctggaacta gtgcatagct gctcaatgtt agagccagaa ctctggttcc	240
cagggagggc gagtatccca aagagatttg aggttaaagt gatggcagtc caggtgggtcc	300
cagacatgct ctcactgtg aattcctgca cttactccta gaatatacca gtgctgtttg	360
ctcccccat cctgagggct ttaaaaagng ctttaaaaag ggaggatctc gaagcancaa	420
gctttttcaa angcactgtt gggaaagcct atagtgggtc catggaggct nttccaaggg	480
aggaanncna agccaacttc ccataagtca ggggnatttg cctggggccc cnccaat	537

<210> 8490

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8490

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atatccccat acagtttggg ttccacagct taaaaagggg cagtgggttt cccgcagtta	120
catactgtac ccaactttct atagaaagat aaaacatttt ccaaccttgc ttttgagtat	180
ttcctaataaa atgcttttaa gtttccttac aataaatggc aagtaaaaca aagtaaggct	240
ttttttttct ccttttcccc tttttatgta ctgcatgttc naggaataag gaaggaagac	300
tagttccatc agagtactag taatcctagt accctgggga ttactgctgg atcctcccag	360
gtatacccct attattgagg ccctgatgca cccctgcact gaggaacctg agaagggtaa	420
gtactaaaca ggctgcatag ccacgtngga ctgttacaag cacaaggtgg gactgggaag	480
tcnccaagtc ttctngnggt taccaggagt accaanggac tnnggcttaa ccct	534

<210> 8491

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8491

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ctccctgtcc ggacactgcc aaccacagc tggaggggca cttaggcac gtcattttgt 120
gattagaatt acacaaaatt tgattaatat tatagctgca aaattaacat acacaatttt 180
cactcataat ttaaaatatt ttgatgaaat tctttgcttt cacaatagaa gatcaatggt 240
acacagtata ttgaactctg taacaaaatt atttttgaga aaatacagaa gtgagaaata 300
gtgatttcct caatttggtt atagtctatc acaaagtagg ccaaagttca gtattaaata 360
gatatcctaa taaaagtgtt tacaagtgtt nctaaggaaa tccattcata agactgnnta 420
ccttctggtt gacagcagtg acangaaccg tgggggatcc ccctnatgga cgagtncccta 480
gccttangcc ctggnaccca aggccccggg ggcgctccgt nacctggtag 530
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<210> 8492

<211> 454

<212> DNA

<213> Homo sapiens

<400> 8492

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gggcatatgt atgcagttgt ttttatttat ccaactgnaa agactgcagc aatttttttg 60
atgagtaatg ccttagatta acactaatta tattgctata aatttggttc aggatcagaa 120
tagggttcag gaaagggaga gaacaaaaaa aaaagtctcc aaacattaaa acagaaaaat 180
gctttttttt tttttttttt ganactgagt cttgctctgt ctcccaggct ggagtgcagt 240
ggcncaatct cagctcactg naggctccgc ctctgggtt caagcgattn tcctgcctna 300
gcctcctgag tagctgagat tcaggcacac gccaccatgc tcagctaact tttggatttt 360
tagtacagac agggtttcac catgttggcc aggctggnet tgaactcctg acctngngat 420
ccccccgnct aagcctncca aangctnggg attc 454
```


<210> 8493

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8493

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agtttttagc ttctttattc atttgaacac ttcaatattc tgtcttcttc aatgattccc 60
ccttgcccggt attttcagct ggaacagttt ctcatcttcc ctatttctga acactttcag 120
gggcttcctt cagtgaagcc caacacacaa aacgtccctt tcagcaaaat ctcagcgggtg 180
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gtttcttttc tgataatgat gacagttctg tctctattat atttgctgaa acttactagg 300
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tacgaagatg tgggatttcc tctaggaaaa ggtgtgtatc caggtaattt actaagccag 420
aagctgctgn gattctatgg cagccttata ttcttatgac acgtcattta ctaagaattn 480
ggggatctgg atgatggcca anagtggctg gactnaaagc ctggcccan atggggggng 540
gg 542

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<210> 8494

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8494

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aaaatattta tatggatcaa ctttattgaa agtgaataaa cagagataat gnggcaaaaa 60
gaaattttcc caatattaaa cccttgatga tactttttaa ttcactataa ggaaaagaat 120
ccaccagtag taggtagcta cttatctttg ctgagtggtc tctgcttttc tgcattgtcc 180
acaatctttt ctccacata aagccccctc cgctttcgta ctgcgttcac gtacttccgg 240
gcttggttct cagagtcagc cttctcccca aagtgaagt attcctctc agtagttggc 300
accagaagg ggtcactggg aatgatctcc caatggctga atactagttg tgggctggcc 360

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aggccacttg ncctcttctg atttcatcag caaaaccaa gctttcagca acaggcagca 420
cagcttgatg atgaacatgt ctggcccttc tttcatttct tcttgaagac ccgacctnt 480
cttntttgac aagacagctt agactcgacc gagaacatta cngtgggcat gatgtct 537

<210> 8495

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8495

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gagccaaatt ataaatagga atataggtag gagttcattc attcagtaaa tattttattga 120
atgcttattg tgtccaggcc ctgttctcag ctcttagaat acatccatga acaaaccaga 180
taaaaacttc tgcccttgcg cagcttatac tctagatcgt aagggatggg attagcaata 240
aatttacata aattcaacca tacctactgg aaaaagacac atgcatggaa attattaatg 300
ctataagaat ctcttgatat gcagtttgta tttttgnact taatataagc ataatatatt 360
catacctaca tatcactccc agggatttaa actttaagac tacnaagaga aattttattg 420
taatctaagg agattttcaa ggccatctga gcatgctcaa ttttggccct angcacggct 480
tttaaaacct aacccccctta caggtgngga ttccctgnnc caaatggaaa ctttg 535

<210> 8496

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8496

ctctctagta atgactttat tcatgaatct ataatggaat tcaaaatagc aaagaacatg 60
aaaatgttca gattaatatt tattaaccaa atgcatcaga aaatacatct attttcacat 120
atcaaaagtg cctaaaatgc atgtgagaat ataaatattc tccactttgt ggaacttcaa 180

gataatgaaa aattgcttaa tacactttgc cacaaaaact cattacactg caaatacaga 240
 agaaataaaa taactcatta cattgcagat caaaagaaat caaatgtaac tggcaaaaata 300
 accatttcat ggctaattct ttggtaaagt gctattttca cactgaaaaa aagaaattag 360
 aaaagattaa aaatttttaa ttctgaacca tcattctgaa agtctgaagc gttttcttta 420
 gtattcacta tggatcatcac attcatgngg tcccaccatg agacttaaca ctttctcaaa 480
 atcttaaaaa atctttcatt cncggattat ttccgggag gttaaaaatt ttncccatn 540
 gtn 543

<210> 8497

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8497

aaagacaggt tctcactctg ttgtcctggc tgcagtgcac tggctattca taggcaagat 60
 cccattactg atcagcctgg gagttttggc ctgctccatt tccaacctgg gctgggttca 120
 cccgtcctga tgcaagtttg tggtttcctg cttcaggagc atcaccatat tgatgccaaa 180
 cttacaccca actggcatag tgtaccacag ccanaaactc ctgggctcta gggatcctcc 240
 tgcttcagcc tcctaagtag ctggggctgt acgcatgtgc caccaaact agcaattatt 300
 atttttaatc ttagaaaata aattngtat agaaaggaat agttagcaca ttatgtcta 360
 aagaggaata aaaaaggga actgggggtt acacaaaatg cattgnagt actgattttg 420
 aacancctat caggtnatt caaccaaact gcncaggaga tgcatttagt actnaacca 480
 ttcagacatc atttncatg ctaactggtg taaacctagt ng 522

<210> 8498

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8498

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atttttgctt ctttttaatg taaacagaat acacaatcac attaaaaacc ccaacatgac   60
acagaataca cacagaatta tatatagata ttacaggcc ctcgaaagcc aaaaggaaaa  120
atggcccctc tggttaaggg aagcttctct tcctacctg tccctgtcca aaatcaaagt  180
gctgaggcag ctgaaggagc ctccgcaatt acttctggat ataatgtagc aggaggctgg  240
aataacatca gaaacacccc acccccaccc cagagcacia ccaagatacc gactttctgg  300
ccctggccct aatcctaaac tctctctctt tgcaagctga caaagcaagg atttgtatgt  360
ctcgagaggc atcagcatga cccctgaaat tcagatgcac ggcggagggg ttcccatccc  420
attccagctt tccagccttg ggctgattgn gaaatgagcc aaaaccaacc attttccaaa  480
aaagaagggt ggggaaagta aaggaagaat ggatcttaag gcnnaaataa tgg       533

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<210> 8499

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8499

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cagattccaa aagagtaaat ttactattg gagtacagtt agattgtaat cctcttgaaa   60
cagatacttt ttcttttctt aatcacctag atgacaaatg taagacttac cctgacttg  120
gtccattgat ttgttcattc attaatcaa caacatttac taagtttctc catgtacact  180
ggactgctca aagctctata ggagatacag taatgtgctt tgctgcctct gaatggagca  240
gtgtccctcc cagcctatgg gcatggctaa attttagaag gattcttctg cttgtcttca  300
actcaaaga tcagcctgaa cacggagtga aatcaccagt gttcctggca ggaagagacc  360
ctgttccaca cccaacacat catcctaata gtaggctttt gacacagtcc tattaataa  420
tgaagcatgt ctctgtctaa gtttatataa tcagtacttc ataattcaga aactttgcct  480
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<210> 8500

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8500

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tgggactaca ggcggtgac accacgcacg gctgactttt cttgttttgt agagacaggg 180
tttcacccat gttgcccagg ctggtcttga actcctagcc tcaagtgate ctcccacctt 240
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cgctcacact gccccaggct ggccaccgta tgctccttcc catccccccg tgttatttca 360
acaagtctcc tcatcccagc aattcttcac tctctagctc atctgatacc ttctctggcc 420
tgccctggt tccttttggg tacagaatgg tatcagggcc aaaaccctga gtgcaccggt 480
caatgngttc aggncctnaa aacttggnaa catttgggca caagccctta naaaaagncc 540
cct 543
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<210> 8501

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8501

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gttttccaag aaaataagtt ttgaaagtgc aaaatgacaa ctcaaaaagg tcccctttcc 120
acctcatgca ggcaaaggac atttaaaagc acatccaact aaatcaaaaa agggaggatt 180
agaaatcaca ctagtctatc cttcattatc agggctggct tcaaacctga atgtttctga 240
gtgggatatg ttgcaaaaaa aaaaattaaa ctagatccaa gttacatttc ctctaaaaaa 300
aaaaatgtca aaggacagct gccaaagattt gtttttaaaa gacaccttc aggtaagagg 360
tagtgtatgc tagctaggac tacaggctgc caactcaaca ttgcttgaga acattaagtc 420
ctttgaagca tgttcctgg agtctattaa acattctttc tctggggtca aatgtcaagc 480
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catatccaat agcatcttct ggttcntgga atcctttctn ggaactggat tcctccttgn 540
aaa 543

<210> 8502

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8502

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aagcagatta ggcagatttc ctaaatactc agttaaggct atggtgtgct tggttttgac 180
cagagcaatt ctatggcttc cttttatfff tctccctgga taaaactatg cttacttgat 240
ccatgcaatt tcagttgtta cagctttaac ttataagatc aaaggaatta aaaagttgtc 300
agaatagatt ttcaaataat gacaaaaact gacataaagt ctacacagaa ctgacataaa 360
gtctacacag tcctcaggga tatggataaa acaaatgaag tttcatgact ggaagggggc 420
tcccttctaa gtaaataagn catagaaagg tatgtaaagg cttttttcat gaaggttcca 480
aaggggaaaa ntttaaacca tgggtcaaga acnctggtn ctaaattggn gaataagggg 540
ng 542

<210> 8503

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8503

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gtggcagaag gcaaataata atgtattcaa agttttacct ttaacaatta cacttgtggt 180

tccagttatc tgttgataat ataaattact ccgtattttag tgactcaaac aacaatttta 240
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 gcagccaggc atggtggctc atgcctacaa ttccagcact ttgggagact gaggtaggag 420
 gattacttga gcttaggagt tcaagaccag cctgggcaac atagtgagaa cccatttcga 480
 attatttnaa aaaaaaant taaanccaaa aggaantgaa ggcttactac ttgcntattg 540

<210> 8504

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8504

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 aaacattttt tggncgtgtg gaaaatgtaa ttcttgagat cattgttggg ctttgtcaat 180
 cattttcctc accatcaaat caccttaagt gacttgggag tgtgaatcta ggatgttcaa 240
 ttttagacca attttctcta tcttctaaat gagtaaacag gctctgtctt ttataaaagg 300
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 ctgaacacaa aggaagtctt ttctgaatgg ctctcaatca cacataagga acatatgnnt 420
 tccagttaat ctgtccttga tgtacagcag tncagctgtt gctttgcctt tattaaaata 480
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 tn 542

<210> 8505

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8505

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gatattagaa acagtagaaa gacaagttac acgtcaatgc ccaatgacta gagtcaacat 180
taaagagttg taatttaagt aatccaaact gacatctaata tccaaaatca ttataaaaat 240
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aaagatgcag atacactgaa atacttaaga gccttattaa tgatttttgt tattttggat 360
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catgtcatct tgggtggtcaa gataatccag taaatttcag tccattcaag tgccgcttta 480
tggtctaata gcttctctgg atcagtcctgg ttcttactct tactggaang nttttgctca 540
an 542
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<210> 8506

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8506

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ttgaaaaaaa accatactat ttaaataaga attcagttca tgaaagtta caaaatacaa 120
ccaatgtact ctgacttggt gttatatctt aactatctca actgtacttt tctggtatgg 180
ccagaccttt tgcaaatatt accatggtat tttaatttta tgatataaaa cagtagcaat 240
ttattaagtt ttccattata aaaattaata tggcaattct caaaatactg aaaaaactgt 300
tttatgaaag cagtaccac atcactgcaa cgtatttctt ttctcttaga aaacatcttc 360
aaaaggcaca ttttaattac tagtgtttat atctaaagat agtagtttga gttttgaatt 420
tccgtcaatt ttccattatc tcaaaattga gctaattggag ggttggaaga ggtaggagaa 480
cgcanggttt caatggactt cctnanggca gcanaatccn attcattttg gccctgggga 540
nc 542
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<210> 8507

<211> 174

<212> DNA

<213> Homo sapiens

<400> 8507

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gattttaaaa aatgtatttg tgttttgcag gttggaacgc aaacccagtc tggccacgtc    60
ccgtgaagtt gtggacaaaa tgtttcagtt tctgttcacc tctgtgcgtg tgtgtgtatg   120
tgttgtgtgc atgtgtgtgt gtgtgggggg gtgggggatg gggtcggnnn nnnn         174
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<210> 8508

<211> 312

<212> DNA

<213> Homo sapiens

<400> 8508

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atgcaaggac tgggaaagcc atttttatTT tttttttttt ccccaaactc actgtaaaca   120
acagtaactt tggttaaaaat aaaaaaagtc ttctatgtag gcagagcttt gtcttttcaa   180
agaggggtggg gtagggccct gaggggagta aggtgaggac aaggaacaga aaggcgtgag   240
gtgatggagg gaggggaggt ggaaggagga nagagaaaca ggnnagactt tttcccangg   300
ganaanctgg nc                                     312
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<210> 8509

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8509

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 ctcagccata aaaaggaaca aagcttaaac acactgatga acatacaaac atgctgagta 180
 aaaggaactt acagaataca tactgcataa gtgagtcctt tatatgaagt tctagaatag 240
 gcaaaattaa tctacagtga acaaaatcct aacagtagct gactgccagg ggaggggaaga 300
 agggacagga gagagagggtg caggaattga ctaggtgaaa aaattcagat gtaatacaga 360
 tgttcagac ataggggttt gagttacatg cttttacatc aaaactcatc aaatgagtct 420
 gggtatnggg gntcacacct gtaatnccag ctactcgga ngcttaggca ggagactccc 480
 ttgaccagg aggtggaggt tcantgagcc cagancaggc cctggacttt taccctgggg 540
 gatn 544

<210> 8510

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8510

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 cggccatgct cctgtggctg ggctgctcta caaggcggtt cacttttctt caccacacta 120
 tgtacagtca gtgctccaag gtgatgggt acagtgtgc atcagtgagt ctgtacacac 180
 atttttacat aaattacaca cgactcatal atgaaaaata gagcctaagg gcctgtattt 240
 taatgagaaa aaaaaaattt ccaacatagt tcgggtagct ttgaatggtc tagtcaaaaa 300
 atacttttgg tatataaaaa gcctgtccgt acaattcaca ccttagtgaa agcgcccttc 360
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 cggcagaaaa ggggtggccc tgaccccagn tncntnggcc cagctgtgc tccttggtgg 480
 gcgggccctt cttgacacca ggcgtntggc atccttaagn nccaaacaag ccccgtttac 540
 tggncctggc tggccttaaa caatccaccc t 571

<210> 8511

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8511

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aatgaaaaac accaatttat tatacttatg atactgttta ccaggacctg agcaggctac   60
ataggagttc tcacatgat agccaaacct taagctaaat aaatacacia gcatgtgtta  120
cttatcaatc tgaaatactt cttatttaat ctatgtaata taaaaatcat agtaattctt  180
tttattgaat ataacaagaa aatatacagt acacatacag ttcaaagaat tatcaaaaaa  240
cgaacacacc tgtgtaatct ggttaactac ttcaagaatc agaacattat cagctcccca  300
gaaacctccc tcatattcac tcctagtcac tacctccttc ctcaaagca gccactatcc  360
tgacttctaa aaccagagac tgggtcatgc ctagttttca gtttcatatt aatggaatca  420
taatatgtgt tgnatggctt cttttgtcaa cattataaga ttcacttaca atggtataca  480
tagctgtaat ccggtactgn tataaggcag gctacatcta caacntaagg cttttaacaa  540
tgnactgggt ggtctacatt angntatccc a                               571

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<210> 8512

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8512

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agccacaaac tctcggcatt tgagaccgtt gatttttaat attttcttaa aaaaatacaa   60
aggaaattaa ctctgtaggt caatacaact cagggaaga gggaaaaatg gaatttcaga  120
gcaaagggtg tttagggttat cacattccca cactcctaata acccacaaaa caagaatttc  180
actccatgac acagaggaac attgaatggt agctcanaaa tgttgatagc tgagggtactg  240
aaactaacia aaggattttg gttgtccttg attattctgt cctgtgatga ataaaatcta  300
cactaaagga caggtaagga aaacttatag cagaaaaaag actagatgta ccaaacacag  360
cagtacaaac cactccttgg cagacatgtg cttctaaaag aatggggcag taatcaggta  420

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gctgaactac taggctnctg ncactnccag cccattccca aataaatagt gtggaaatgt 480
aatagnghaa tagtatttga tcccaccaa aaangntttt aacccatt 529

<210> 8513

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8513

atagaaaata aaattaatac ttgattttat taagggtggtt tatcacaaca aataccaaca 60
agaagagaaa aaaatctcag gaaaatcaac agcatgcatg gatttggaat gacactatgt 120
aaataaatgc aatgaaataa aattgacttt tcaacacttg gacagcatga agttcaacag 180
acaaatccat taaaaaggga aataaaagct caatctcaag gtgaaatttt tgtccatgac 240
actctcgaat tctagatctg aaaaagtttg ggataaatgg cagaaaacaa cgcgtcatca 300
cgagatctct aatttaatcc aaagctattc cggaaggcag cagttttccc tatttcttca 360
ccagcgccct ggggcaaaag gttaggaata atcggttca ggaacttgaa ctgcccggcc 420
cctgagtctc cgggtcaaaca cacctcgtag tggtagctct gggatagggt nccngtgccc 480
gntcacgtcc ccagatgccc tggaaanggg cccttggccc nagcancgac ccgaaccggg 540
gccgcctggt cctctggana aaccga 566

<210> 8514

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8514

acttttagtt cacatTTTTT aatgtttaaa aactatgtta acagagcagt tatagaacag 60
aacttcttat atttctttat ttacaccaca ctctgaaaaa aaaaccaggt tctatttgat 120
taactatgaa tagcaaagtt ttgtgacttg tgactcactt aaatcaccca tctgaaattc 180

atttacaagg tttttacatt aataaaacag tagtgtggta catatattgg actcagatga 240
 agtctaaagt acactggact ctagagagtg gattacatac caacgaccaa gattcaagtg 300
 tttggggaaa aaaatacctt agacagtcta tgttggcgtc aacactaaaa tnaaaggcaa 360
 acatgcagga ctttcaaagc ttgattagat aatggntctt tgnntctttt ctttcaaatt 420
 tgtgtcata attaatatc angttccctc ttncgnttt catagatncc caaagttgag 480
 aaaatgcagc aattcaattg ggaaaaaac attcttctnc caacttctgg tttcatatga 540
 ctggggaatg gtatcaaggg taaaaag 567

<210> 8515

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8515

aaaacataag tatgggtata tttatttctc tcaaatgcat acaagacaat aattacacag 60
 caacaaatct tttgttcaac aatgatttga ttcataagca ttgaaattt acataatttc 120
 atatcaatac ccttgtattt ttaaatacag taagtaaaaa agcccccaa taaccaattc 180
 ttatatttcc tatttatccc tctatacatc caaactttta aaaagttaca aactgaacat 240
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 tatgattcag aaaaattctc atactgacaa gtacagtcac aggtggtaaa gtaagttggt 360
 ggcggggaaa atgaaagaag agacagacac aagtttgctg tcttaatgtt ttactaatcc 420
 tgtcagttaa aaatggngac gtcagtgagaa gtaatagttt aatatgagga atgggagttt 480
 gccttgcagc ttgagacatg catttcagga tttttctat tggactgggc tcctggagcn 540
 aactngtgnc cnaaaanaaa ta 562

<210> 8516

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8516

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gacagaagag aatgtaaaca ttgggttcca cccctggag ctcaaggga gacccttacc 120
cagataggga ctaactggag ggggtgaagg gaacaagggt aaaggtatgg gtcctgggtga 180
gacaaaagca ggggggcctg agaacacaga gcaagggtggg ttggaggga gcacagcagg 240
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gtaaagggga gctntggagt gtaagaatct tgaaacttgc tgacttccat taaccaggag 540
tcanccttg ggattacaac cgggccattt anggacagct 580
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<210> 8517

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8517

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ttctgcagggt tctttcaaat atcatttcac ttagctcttc tacaataaag cctcactact 120
caaagtatgg tccttagaat agcgtcatca taattgtttg gaatgttatt agaaaaataa 180
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ggcaaactgg taaaactaga aaactaattg gcaatagcta ctaaagntgg ccaaagggga 480
tctatacgac cgggcaattc ctttccaaa atttccccac ngaaaggntt tttttgcttn 540
c 541
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<210> 8518

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8518

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ccaaaattgt gctttattaa atgctagttc attggaatgt taatacatgt ttcacacaca   60
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aaagttaagc ctgtttcttt attataagac ttttcagata ctttcccagt gcatagtgtg   180
aatctccaca aagcaagtga aacatgaata gctccctaaa cttacttgac cacagaatgc   240
ttcattctat ctccatggaa accacttggt aaagtctcct actccaactt tcttctccaa   300
caaaactcac ctgtttgtga tcatctgaac tcattttgtg ctcttgctt tatataaaag   360
agaagtcttg tgaaatgttg aagaagcagg gttatggcac tagtaatgat ccaggcctat   420
acaaattggt aaaattttcc attatttttag ttcagaagcc ctaccatagg tattctaaca   480
gtggattgtg ggaaccctagt atgagtgggt gagacatggt tccaaaatat aggagctntt   540
ttaaaaagga atcccttaat aataccgg                                     568
    
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<210> 8519

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8519

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agtagaaaaa ataccttttt attaattatt aggaataatc cattcatgta atgcaggatg   60
tatgttggag aaggttaagt acagccacat gaatgagggg aaacgtgcaa gaggaacagt   120
ggtgagaagg gggatgggtc cccactttcc acaaactata aacagcaaca tgaacacaga   180
gaatcacaaa taagagggtc tttcctcatg tctcctctca cccattctt ccataatgag   240
tcccagttgg tccctagagg tgccagggca tctggaagtt ctgggctggg agtgggggtgc   300
    
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agtgagtggc ctcaaagttg tgcagatgct tccgagccag aaacaaagcc agctgccgcc 360
gtccatctgc actcatgtct tccccacgct tcaaggggaa agtcngggccc cngttctgcc 420
tggtaggaa cggaggacag acnggacacc agtcctnttt caccttccat cggctattaa 480
attggggctt tcttcancct gtgaaggang gcttcaacca ctggcttanc actcgaagac 540
cctctttggc ataccgggg ataccgatgc ttgaaggac 579

<210> 8520

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8520

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tttgacaaat tcagcattaa ctgccaactc tatagacatg ttttaacaaa aagcaaaaca 120
aaacaaaaca aaaaaacaaa acaaggcatt tactcttggc cctttcagta caggcgaagt 180
gttctattgc atcacaagtg ctagtgatgc agtaacagat ccaaggcat aatattaaat 240
atgttttttt ccaactgcga tttagttgaa aaataacata atacaaacat atattaatgg 300
ctatcaagac cagcagtgat ctgcagaata cctagaggcc tacctaatta gaaggttgaa 360
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agatatcttt gattcaattt tataagggtg ggtgggggaa ttgagaggag cnagatttgg 480
ggaaaactgg cantgggtgc tgagttaant tngggaatgt ggggtcaaata agcnatntgg 540
ttaggana 548

<210> 8521

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8521

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 ctttgtttct cataagtata tacaactata atttgatata taataaaaaa aatctaaaaa 120
 ggtagtctcc taacaatcat atgaagacta tcctaaaatg tccttttagta actgtcatgg 180
 actgaaaagt atcccacgaa gagacaatgt ctactcagat catgtgaata caaacttact 240
 tggaacatgg gtctttgtaa acataattaa gggctctccag acacaatcac cctagatcag 300
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 agatttgtcc agaagccaaa gaactccagg aattgcccac ggccccagat tttnggaacc 480
 gccnttnaag gccggttatg gatcttcctt aaggctcnaa agganccact ttgtgacctt 540
 tganttaac 549

<210> 8522

<211> 414

<212> DNA

<213> Homo sapiens

<400> 8522

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 aaagggcaga acccagtgtt ttttttaatg gttgttattc catgcagaaa cactgactga 180
 tccagaactg gtaactaagg cggatgatcaa acaggaatgc tttcttctc agtttaggac 240
 gaagacccgc catgacaatg gcgggaacgc tggagtaaaa cctcacggcg gccagcatgt 300
 agtttttcgc cagatttgtg gccccacccc caagtaccca cgcgagagg cctccagtca 360
 tacagcacia agggcatcgc cttgggcagt nnaggctcac tntgtncnaa nctg 414

<210> 8523

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8523

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ttttcaatag aaagattttc taaggacatg atttggagcc gtccacattt atcagatgcc 180
ttttcattaa ttttttccat ttttgcaatt ctgcatccaa actgcatggc ccgtttgggc 240
agaagagcag aggctgtaag accaagttcc acagctgcaa ggcgtaaaag taatttttca 300
ccaattcctc ggggtaaagt caagtttgct ttttcccaa tcggcagaga atttagaaag 360
gagacaacat tttcatccag gaaaggaaat ctgcttctt ttccatgatc accaataact 420
ctgtcatcac gaccaagatt ttaggaagaa attcgacca gttccatcat tatttcttat 480
tcaatccttt cagcccatgc gactggaagc ngacccgatg accagaatac ctggaagggtg 540
ctcattgnnc catttcngng ggactacctt gg 572
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<210> 8524

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8524

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aaccacatca ccgtccgctt ctcttgcttc tagtagtgat aaactatattt gctctttatg 120
gataaattca ttcattctctt ttgtaaccct ttctgtttgc tgcttttctt cttccatctg 180
tttatcatgt aatagctgct gttctttttc ttttctccaa aaagcttcct gtttttgccg 240
gattcgatgc cgtaattctt catcatcagt gtcagatgac tcagatcctc tgtcactcct 300
ctcatcttca ctgtctcctg atccataacc acccagtcca ccgagtccag tgagggaagc 360
cagtgcactg gactgtgccg gctgttttgc aggagctttg tatcacatca acaacaggaa 420
caacatgtta acacaaatag ccncgattca tagtcatgag tctattggna ttggtaaaac 480
tactactaat gctgnntttt ggggagagaa naaacnntn aaacctacca tcattttaac 540
cagnttaagg ctgctttgaa atataaccct gg 572
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<210> 8525

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8525

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gaggggcatg tcatcatttt aatgatgtga tctttggtgt ttccctcatt agctgtagac   60
tatccctctt cctcccacca caatgtttct atgatgagtt acaaacagaa aggaaatcac  120
attttcatac taaaaacaaa atgatcagag ccttgatttc tccactagaa actacacgta  180
cagttaagag tccacatgca acaccttaaa tcacagactg agacctcaca ttctgacctg  240
gagtctcttc cccttcccca gccttgggct agctttggcc taggctcagg taatactgac  300
accacagggc gctgctctga gggccttgcg gggagaagac tgggtggaaa gccctggggg  360
ctggccagcc tacaccccc actcctgagt gaggacctgc ccactgtccc ttgaccccat  420
cctgtatcag gcaaagcagg cgccccctta cccacaagta agtcccccat tagtaaatgc  480
ccnaagtccc tgtccttcaa gaaatttggg agcctgggcc cgatcctggt gggttcantg  540
gggtaagacg accaaaaaag gttgaanctn tggaaaggct caaagttgga ggnggg      596

```

<210> 8526

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8526

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aaccactgta aatttattat gcattaggaa gcttaacctt aaaaccaata gcatagtaaa   60
aagatatgtt atctctgttc atagcagaac aggtttcaaa atatattttc ttttaaattg  120
attcagtcag tacacaatcc tttataaaa ttgtatatat ttttttctgt caataccttc  180
attacattta taaatacaag atttacacag caccocatca aaaaaaaaat taaaaccctt  240
tacaaatatc tacatatatt tcatacctat aaaactttca aaggggtgct ctgttaaagg  300

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tgggccctag ttaatgggtcc atttactggt gcagcaaaat catataaatc tgtaaagttt 360
 ctttgccata aaacatcttc aaaaaatagc angacactta tcgnggaacc tcagcttcat 420
 aaancctaata ttagnaangg acttaatggg cgtantccat gcgatcaaaa aggttaacng 480
 gatggaataa gatgaattgg aaaccaatgc ctctcagag canttaggcc gaatgtgatg 540
 gtgagaaaac tttagaagcn ggactggaaa catggn 576

<210> 8527

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8527

acagattgat ttaaaccattt tttaaaccac atgcttcttt ttctgggctc cagccagatc 60
 tctgggggag gagttgttgg cagtgggtgat ggaattggga agggctctgtg agaaaatctg 120
 aggagcttcc tgcctccccc anatctccct cacaagactg tctctctcag ggttgcttgt 180
 gagaatcatt taggaactgc tgcagngttt tgatgttttc tgaaccctc cccanaaagc 240
 ccaggagctt gtaattgaaa caagaagtna agggaaagac ccagaatcat catttcccca 300
 aagtcattag aggaggccag taaatgtgtt tagggggcac aagttcccaa acgccacccc 360
 accattcctt cctaggaagt tctcaaaggc cagcaccaag aacctgtccc tctcttttca 420
 tctcctcctc cttctggtct nctcctgggg cttggaaaac cantgcttg aaanaggaaa 480
 ggnaaaagga ggacttaaaa tancatgatcc naccgttctg ctttccgggg tgacaangga 540
 ttgccaacc cttaaagggt tgcccgaagg g 571

<210> 8528

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8528

gagagttgaa acaaagaaac tttaatgttc tggctgacta tactatgttg ataggctgac 60
aattactgca tctatactga aaatacatag actcttttcc ttatcatgag tccctaaaca 120
atacaataga acaactatit gcatagcttt tacaatgcat gaggtatitit aagtaatcta 180
gacataattg agagtataca agaggatgtg ggtaagttac atacaaatat gtcattitit 240
aaaagggact ggacatggct cacggagtgc tggaaccaat acccagcagg tatcaaggga 300
tgactgtctg gaaagaaact gaaattactt aaggttttac caagtgtta cattcacagg 360
gctatctcca atgggttctg acaagtatct gaaatgaaat aaaattaata aangctttcc 420
acattccttc cttttgagag aagctntggg gctttttaang ctatccaggg actgggnanaa 480
ccaatntttt nccaattctt catcctac 508

<210> 8529

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8529

gtagacgggc taaggtttat ttacttactt aacattttaa aataattcat ttgcttcaac 60
aacatggcag acaatcaaga gtactattga aacataattc agagagggtc aggacaggaa 120
agatcacaac ctcattcctg aggtggaatg aaagatctaa gccaggcctc catcctaggc 180
caggctcctc cattaagcag agacaaccaa aagataagaa agccttgcc tcaccccat 240
caggagatag cctgaactgc tcacaaataa gaaacaactt gaccagactg aggactggtt 300
cctgatgagt caataggaaa gtcagttggt tctctcttca gtaggtgact tagcacctt 360
ctggagaaca tagagtagta gtctggacct ggaggctaag gccacattc aacaaagggt 420
accttctttt cagtaacgct ttggctcttt ttccaacagc aagaaacctg aaatccangg 480
aagtcattta aaaaaccct ttingctggac ctggaagcat ttccaagnca actgggggtan 540
aaatnaggcc tccacnttag ggggn 565

<210> 8530

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8530

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gactgttgatg attttcagca ggtacagttt tgattttatt gcaaggcaca caatcgata 60
tacaatgcat aattatcatc ttttaaagta caagataaaa atcatataca ttatagtaaa 120
gaacatatga gtatatcttt gtttcagaga agaaaattgc ctttaaggaag ctgggttata 180
ccgttttttg atgtgatttt cgtatttata ctgaatcatc cgaacagctc ttgggttagaa 240
aataaatctc attgatagga cacacaacct ttcacagctt tcactttaca atgttccaat 300
ttaaagtcag ccagtgtgct ccctgaattt gcatgagtca tcgtatttca tcccaggact 360
agatgaaaca cctataaatt gtctgacaat agttatacac gttaagaac tgnatttctt 420
agtaatatat cacagaatag aaccattttc ttaagatttt atgtgactct ttattgattt 480
tttttctcca agctattttt ncaaagatg gattaatttt gggattancc tanagtttga 540
cttaaactcg aaggggctct ttna 564

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<210> 8531

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8531

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aaaaccaaac caaatcattt tattgggcaa tttccttnta ccanaaaatt actaaaanta 60
taaatattaa ctctntaaaa aatactcaga atagatctgn aatcttctc ctctctctnc 120
gaactggagc caatcttntt ntttaaacnc tgatggattg catacatgta tgtcttccat 180
atnanccaca tacacaacat tcagatacac ttccctttgt gcagggggat acnccancct 240
cctgccnggt tntggaagct caccttataa tntaccagga caaagctgtg tgctgagtag 300
gaggttatgg nggggttggg gagtaacaag gagataaaag accttggggg cccaacttcc 360
ttatgnggac agagaagata ggtcctttac tcctctntcat taccctgcc tctcatggac 420
tgggctaact gaaggccaan ctcccaaaga agcttggact cactgngtgg gattactggn 480

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ggtgtggctg tcagctcagc nccggaaggg caaactttna aangggctgg gaaccagg 538

<210> 8532

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8532

cacactttgg aaaatttcaa ctttattgtt ccaaacatga gaaaatccaa cagttgcaaa 60
 ttatgccagc agttaaatgt gaatcctact caagaacatg ttccactggg agttttgatt 120
 aaactctcta ctctgattta actgttctct cttccatttg aaaaatcaga gtacttttta 180
 atcagtcttt gctaaacagc agctattgct attcaatgga gacgggtggc accatttccc 240
 ctgcatcgtc tctcctacgt aatcagtccc tgatgaactc tcttcccata aaaatccctg 300
 tgtcctaaag tcatggcgtg ctctatttca tggtcatttg tagagcacag cagcactgtg 360
 cctgtcagga aaagtgtgtg ctaactgcaa taagcatgat gactgccatc acggttttgt 420
 tattctctgt ccacctccat ggtctctaaa tcagacaatc tttaatctga aaaggcagtg 480
 tccttattcc tccaggaaac tggatagaaa cgctcctcat ctaatggaag cagccctgnc 540
 atcttactgg atcttttcca gaccncaggg gaanggc 577

<210> 8533

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8533

accagtaaaa tagttttatt tgattttaaa atagtcatca atgtgaaaat ttctcaaagc 60
 ttaagagtaa cagtctagag ccaagggttg gagtgggggc caggcctcac acagagccca 120
 gcttgaggcc cctgagcccc accctccttt ccagagggag ggaggagaca gctgaggggg 180
 ccctgaatca gtcctctccc tcgtcccca ggccagctgt gccaggcccc tggagggcaa 240

cagctcatgc ggaggactgg ggggggaagc aaacaggtag gaaacggaaa tgaggttaac 300
aattacacca tcacccccaa aaaaaaacia aataacaaaa cttgtgacta tgaaaggatg 360
gaagatgaat actgataaac tcctcagctc ccataaaaag ccagctctgg gctgggttgg 420
gctgattgga ggaaaggctt tgagacccaa ctgcatgtta cctctgaaga attaatatc 480
tangaaaaag ggaaaaccat gaggcaagct tctgaagtca gttacgcan tnacaaggcc 540
ttggcattgg ccacaacctg ccccttct 569

<210> 8534

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8534

gattnggatg aaatatitaa tggaaaataa aaacatatc caaactgata agntaatct 60
ggagaaatgt tttagccata aaacccaaaa ccggaattga gtaaataccg nggttcttag 120
ttaagtaaac acctccatct tatgtaaaca ggtttaaaac aaaaaaata ttattttctg 180
atttggttgt gtaatcgtgg gcctcagagg aaaagcttcc taaccctttt gtcatatata 240
tatatatit tttgagctt gctttgtggc catgctggaa tgcagtgggt caatcttggc 300
tactgctac ctccacctnc tgggttcaag caatnntcct gcctcagcct cccaagtanc 360
tgggactaca ggcgtgcacc accatgcca gctaattttt gcattttgta naaatgtgg 420
ttcaccatgt tggccaggat ggtctttgat ctcttgacct cgttatctgc ccacttcagc 480
ctccaaagtg ctgggaatac naggtgttaa acaccggacc cagnctcctt tggcatntct 540
tganggaccc tcaaaaagan atccttgggg ggaac 575

<210> 8535

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8535

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aaaacttaag agttgtttat ttctgaaatt tticatttag tattttcggg ctgcagttgg 60
ctatgagtaa ctgaaacat gagtaacaga aaccatggat gggggaggat gactggagtc 120
tgaggtatcc taccctacat ggcctgggaa tgtttgttct catgctctgc ctggcagtta 180
attgttcaca agtgtcccca taagtaactg tcgagaagat tctcacagga gaccacgtgg 240
gttgccctgaa gaagccagag tgaaggaggg ttgaaatcaa cgcctttaga gtcttaggaa 300
taaaagttaa aaagccccag agaaatgttg tcctttgtcc acggcacctg cactaacccc 360
tcccagaaag tgggcatgca gtttcccagg ccagacgagt gttcgttgct caccgaagac 420
cagtgtttac tagcaggatt gtcgccagaa gcagctgcat tctccccgga tgcagacctg 480
cccgttggtg gggactctgc tnacacngaa catggccggg acacctgtgn ccgttggtgac 540
cttcancact tttggacatn tcgcgtgggt gttgggnaag 580

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<210> 8536

<211> 590

<212> DNA

<213> Homo sapiens

<400> 8536

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atttcaaaaa cagggatatc tgcatttaat ttcatcagc aaatcaattc cagtttaactt 60
accatctctt aaaaatggga gaaagcaaac ataggacgtg aaaagttaa gatgcgtgac 120
atactggaga gtaataagac atactggaga gtagtaagtg cacacgtggc aattaagggt 180
tgtaatttag atgtaacaca agaaaaaaag taaaattact gtactttatt gctgtatcta 240
tgctttccca gtatagctat aatactacaa ggagccacag agtgccacct tctggtttta 300
aactgtggca cttatttct tttgaaatgt cactttataa ggtgtatgta gaaagcaaca 360
gcagcagtta caaatgttg tctgagtgat tctgagagct caaaacaagg atccgcgtat 420
aggctgaaga aaaagacgtt cagttaacag tgcgcgtgtg agaacttta cacaagtctt 480
cangtggaat tcctgtgtaa accttagtag agatgccact nacgngacc aaaagtnaaa 540
atctttttan ccgntacaag ttaatgaggg ggctggattt tgcaaccacn 590

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<210> 8537

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8537

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gagactgagt cttgctctgt ctcccaggct ggagtgcagt ggcacaatct cagctcactg   60
cagcctccgc ctctgggtt caagcgattc tcctgcctca gcctcctgag tagctgagat  120
tacaggcaca cgccaccatg ctcagctaac ttttgtatth ttagtacaga cagggtttca  180
ccatgttggc caggctggtc ttgaactcct gacctagtga tccacccgcc tcagcctccc  240
aaagtgtgg gattacaggc atgagccaca acgccaacc ttttttttt taaacttta  300
ttaaatgcta ctttctcata gacttcccta gactggtttg caatctaagg taataggaaa  360
caaggcattg ggcattttga agaaactgca ggtaagcta tggtgccaag cagaagacta  420
aacactgatt tgagtgtcaa atcttcagca cgttctggga tagaggcagg ttctcaaata  480
gttctanng gtccttinctc ttcactaant aaattttcct tttttgggga atcnangcag  540
atacaaacc ctggatggcc tttttggcna a                                     571

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<210> 8538

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8538

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ataaaccaag aaagtaaatt tatttaaatt actaaaatag cttttaagt catttacaga   60
tcagctgcta taattattht tcctgaaaga cataggtaac atattactth taaattactt  120
gggtcaatga aacatttaat aaaaacattt gtttctctat ataatacgta tgtataaaat  180
aagccttttc aaaaactctg gttttcataa tcctctataa atcagatgat ctgacttcta  240
agaggaacaa attacagtaa ggggtataca tttatgaata ctggtagtac tagaggaaag  300
acgttaaacc actctactac cacttgtgga actctcaaag ggtaaatagac aaagccaatg  360

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actgactcta aaaacaatat ttacatttaa tggttttagt acaataaaaa aacaaggtgg 420
 atagatctag aattgnaaca ttttaagaaa accatagcat ttgacagatg agaaagctca 480
 attatagatg ccaaggtttt actaaactac tatngtagg taaaggaaat ccatttnaca 540
 ccctttatat aaaatcncta tcttggttg nggcncctct taaaagntta ccngct 596

<210> 8539

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8539

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 tctggtacaa acacccaatt tctagaaaag agaaaggaaa agaagaaata cgacgtgagc 120
 ttttttgatc agaagactcc atgaaatgag agcgggtggt atatgaatcc acgtgatttt 180
 tcaagtcttc ctgttgtaga gtcacaaaa tgaccagggt tgtgctgcaa aggagccagc 240
 accatgtggc tactgctttg attgttctca gatgaatgtt tatacaaaaat aatatcttat 300
 cttcatttag tttataaaca tacacagtgc tgtccctttc aaattaagga aaaaaaacca 360
 cacacacaaa tactgcaaag tagcaaaaata caaaggaaaa caaagctact ttnggttttt 420
 ggcaacatta aaaaagaaag aaatntaaaa agcaatgtgg cattggtccc tattcattaa 480
 aaaaaaaaaag ggacttnggg cncnacanaa tcagaattag gttngntttc taaaaattca 540
 aag 543

<210> 8540

<211> 593

<212> DNA

<213> Homo sapiens

<400> 8540

atttaaaact tttattaacg cttgaagaaa aataatgcaa tgtgacaatg tacaggtcct 60

gttgccctaaa tccgtagtag aaacagatat tatcacttag caagctcacg tgggtgccaat 120
tctgagatca gacggggttg ttcctcctta ggaagtggcc actggaagca ttgtttttcc 180
atgctatttc cgtgaagcct tttgcttggg tcgagtttaa atttctccct ttgtgtgagt 240
atgactatag ttctggcctg gtgttttcta tttatttagt tttagatgtc agcattttac 300
tatacttggg cctctcactt cagaataaca gggctattta ttgatacaaa ggagagggtgt 360
tcagatcadc ttgttaagat gcagagctca aaataaacac taaatcttta tttggagatc 420
cacatccttc ctcaaaggaa ggctcatgag taaatttgta tgcagtatna agcccaagta 480
gagggtgtat tttaatgact actttgctta catttttagat tnggccaaat gtctcaatca 540
atgcttgcan gaatgggtggc ccttcccang tttaacccaa anacctggg caa 593

<210> 8541

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8541

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aggccaattt ctttcattaa catagatgag aacaaaatct aaacaatacg ttatcaaaat 120
aatccagta ttgcatacaa caaataataa tgggtgtattt cagcaagttg tggtaacaaa 180
ttgaagtaaa tcaatgtact aagccacatt aacagaacaa aaatgataca caattgtctc 240
aataatttac agaaaagaca taggtagaat acgagttttc attttataca aaaacttgta 300
gtaaattaac agatcagaac ttcctaaatt tgatcccctg catcaatcaa aaaaaacctg 360
catcaaatac tatgcttaat ggcaaaatac tgaaagcgcc ccctatccac ctcaagacct 420
gtcatcagtc aaagatgctt actctcacca ctgggtgcat cctagtctga gtaactgggt 480
aaaacgaaag aactgtcttg ggcgcggcgg gtcacatntg naatccagcc tttgggaaaa 540
cnaggccggt ggaccttgcg gcaagaattc naganengcn ggc 583

<210> 8542

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8542

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cgtaaacaaa atttaataca accatatagt caagtaataa tggttaaaag acattttatt 60
agatacaact tttaaaaaat taaactatgc aagaagtata tttaaacaaa acatgtaagt 120
aagtattcac gtgctacaac ttaactaaga acaattaaat acaaagcatt ctttccacta 180
tgaagactct ggagcctcta attgaaagca aatgacctta ggtctatact agttgtaaag 240
cagattatac ttttgttcaa ctctaaattt gtattgtctt agagctccaa caactctcaa 300
taaaaattta aataaagaaa ccttggggga ggggtgatag gggaagggga gagtaagtgc 360
ttttcaaaa aggtaaatga aaaagcctga agagggaaaa aattgncata agtatggaac 420
aaaaataagt atactttttt gacattcgat gtagatactg naaatgaatt tcccnggttt 480
aatcaatgta ggatagatnt ttggctgaat ntttaaaaag cncctaggnt caaaant 537
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<210> 8543

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8543

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ccttgccaaa ctttattgtg attaaaattc cagagacagt accagctcca catacctcta 60
gccctgtctt tgccctagtt cccgagtgtc cttcaccccc atcttccaaa tcattctctgg 120
tttcacgggg aagaaaaaac ctagggctgc tgtgaatgtg ccctctcagg tccctgagtt 180
ggccccaggt agagctgtaa gagatcagga agagggcctc cctgcctgac ggcgatgac 240
ctggaggcaa cgtgtggagc agaaagagaa gtcgaggtag tgaaaggag tcaggccttg 300
gagggatgcc ccacaactcc agcagcgctc agtattgacg attgcagagt cagggattgg 360
agaggtaggg gctcccaact gggcagcgag tcggcgctct gcagccagag ctctcttctc 420
tcggtcactg agggcggaac atcgccgctg ctcttctngt tcacgcttct nctgnttctg 480
ntgcctctgn tgntggtcct tcccgttgcc gccggctgct ttggttcctt ttccgnaa 539
```

<210> 8544

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8544

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caccagcagc gtcctccctt tatttttagtt tattaataga atacagagng caggcactta 60
cagnggtcaa actgagcgag gagtgggtga ggtctcctca nagagaggcc gccctgggcc 120
cacccatcag ggaggcatgg gcgggagctg anaggccccc aagacccccc gccaccacca 180
cccacatagc ccaagcccag ccaccctggg ggaccagga ggaggaggag gagaggaata 240
gggcaaggcc ggcccgggcc aacgntccg ggcctagcaa aggcacctnt ggcagccgag 300
gctgggccag gctcaggctg tgtggttaat atggccggga aggactatgt acaccttagg 360
cctgcantg ggcactaccg agcccactgg gccaggcttg ccgctgggga actcctgcta 420
atgggaagtt gatatacccc tggacccac aagggtggg gatgtangcc cntttgtgcc 480
cgacttttta naaggcttgc ctaatgggct ttncaccca anaaacttgg tagaatcccc 540
ccaggntgga ccn 554
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<210> 8545

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8545

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aacaatgaga catatgcagc tttatttaaat aatccgtaaa aagtcatact ctggcagagt 60
gatgcattcc ttatctcagc agaaagcaaa cagtctgtct gaaaagcccc ttccaagat 120
ttggaactgt gtaaccctga gcttacatct caatgctccc aagagctggg ctcttgctat 180
gtggtagttg gtctccacaa ttctctcacc ctccagcaat actctctgtc tggctgtgac 240
tcctcacct aacagtagac atgaggctga aaacaacttt acctggacag ggctaccct 300
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acagattggc cctttctctc ctacaaaagg gagttcatag gattaacaat ctttctaattg 360
gctgggagca atgactcatg cctgtaatcc cagcactttg ggaggctgag gcagggtgat 420
cacctgaggt cangagtttg agaccagcct ggccaacatg gtgaaacttc atcctactaa 480
aaatacctaa ctttaactggg tatggtggca agtgcctgna anctcagttc tcggaggcta 540
agccgganaa tnnttgaacc cagggggn 568

<210> 8546

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8546

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attaggtagt attacttgga tttcatggat gaagaaaacc aagatacaaa aagttcacac 180
agccagtaag cagatgagcc tgacttcata gtcatacata gcctgaattg agtcccagca 240
ggagcacatg ggcatggaca tctaccagat ttgggaactg gcgtagccaa gcaagaaata 300
ggagacggaa tcaggagtta ggattccatg cttaggacca tcccagatgg atggctgcct 360
ccctctggga gctgcactct tctgaggttg caggcatcca gggccagggt gcttctgtga 420
ggtgtgccag cacgtgccac tctgcttgga tcaagctatc atggtctgan ggctgcttnc 480
ctcancataa gaaggggctt ctattgggaa gngtaggctt cantgnaggg nccacttgag 540
cctttttttt agagacag 558

<210> 8547

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8547

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 taaaattcct agcacaatac agaagggtga agcttcatta caactggtcg tggcaataat 180
 ttgggggacg tagcatcaac ggatgagaca acaaaagcaa gggaatacac aaggtactga 240
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 ttcagcaaac agggcacgta caatcactgg gatagcattc agccttaaaa ataaggaaat 420
 cttgaaaagt ctaccataag gacaaatctt caaaacattc tggtaagtaa aataagacag 480
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 gtcgtantnt na 552

<210> 8548

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8548

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 tagtgtttat aaatgaggtc ataaagaact ttaataattc agagaagaag ttcaaagtgt 180
 atttaaaagt tgagaccctg ctttacaata ttttataatt ttaaaaaaag gcgttttaaag 240
 gtgatagggtg acttaataat ttccacttt caaaatgggt ttctagacac tgttggttcat 300
 gaaccaaaaa caaacaaca aacaacaac aacaaaacc aaacactttg gcaagcaaag 360
 tattattagt catagcagct tcataacagt ttactttttt aatataaaga tttttcaatt 420
 cacacttgta gggagtagaa aaactaatat gctaagctctg taagctacgc agccaaaaat 480
 aatgacctaa tgaagcccga atctngaaa aggtgcncca cactgcttat atagtancctg 540
 agtaaagtga ancctgggct tattaacttt n 571

<210> 8549

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8549

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aaaccacata ctttatttga tgtcaacatc aaagaaggaa tattttaaaa agcacataga 60
aacccttaag ttagtaatat tttaaactgc atgaaaaaca tattatttta catcttgtca 120
tactgtatat acaactgtac ataaacttct gcatttcaaa gcacttgtca ttataaaagt 180
gaaaagtttg aaagtgctaa ataaacattt cctaattatt atttttaaaa acagcactct 240
tttggagttt atctcttctt tgtgcttata gttgatctgc aaacatttca agtcaaagtt 300
tctggaaact tctttaggaa acatctggag aaaatcatag tagacaaggg ctaagtgcag 360
acataagcag ctccatttta taaacaaaat ttcgaccttc cattttattc cactgaactt 420
ctttgaatgg cccacgaaga tgactccatt tggatcttg naaaacatca ctttttggga 480
aggctttaca tttgntccg aggnaactgg accntaatct tgntggcnct tttanggcc 539

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<210> 8550

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8550

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aacaggtaaa atgaataaca tactttattt aatccaatag agccaacata ttatcattgc 60
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gaaatctggt atatatttta tacattgagc acatctcaat tcagactagg catgtatgaa 180
gtactcaaca gacattgggtg gctcctggat accatatggg acagccagtg ccattctcat 240
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cgcataaaga gagtgtggaa aagctggaag aaatcatcct cttcctttaa gtgctttata 420
ttggatcatat tttctctttg ggggnntctt tctattctga gagaaaatat gtantgggat 480

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ggttttctct tcccactact cttttggttt tactgcaatt aattggaagg acgaattttt 540
 tttatgggtca attgntctct taaaggngnn 570

<210> 8551

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8551

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 ggtaccttta agtgaatgaa taccacattc tgtaattcct gaaaatatag tacagagtga 180
 aatgatttaa atataattta ggcacatatt gattatgaaa atagattatc tctcaatata 240
 atacttctct gtcttggtaa aaataataaa gcaaagaaaa tagttcattt ctgaagttgc 300
 tttccttcac ttgtaaaggt ctgatctcct cccactatgc atatgtaccc tttactgtta 360
 aggaaagctt tgcataatgta gatatagaag aataagctac gtaaatacta aagatatgnc 420
 attctcccaa aggagacaca ggtgggtttc aatgattcct tggcttatgg tgatgagtct 480
 gnanaantca gaanccantt ggcccngctt atatcccggg tttgggggan aaaata 536

<210> 8552

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8552

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 taatttgtac aatccaacta cattacaatt cacagtaaca tacactagct ctaacctgcc 120
 ttggatacaa ttaagtctcc tcaacacact attttatcgc caaacttaca ttctggcttt 180
 tataatcatt ttgcaacacc tggtagta tacacctata gctttgccaat agaaatgccc 240

ctaaatgccc ttcagagagc agaggtgaat actttctcat gaagaaacgc caacttttct 300
aagcgagttc gtttcagtag tgggagccat tcccagtagg ataactctac cacacggtag 360
ccaagccgag ccagctgccg cctcttcata ttgtgcagtc caaggagatc cctggagcca 420
tagcaatact ggttcctggt tgtgaactga acagccagct tcattcttgg ggtctgcatg 480
cangctgcgg ggcacaagcc aagccatctt caatggccct gattatctgn tacattggaa 540
aaggaagccc ccanangtac agtggcttat ttcaact 577

<210> 8553

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8553

gtcaaaaagg atcaaacact ttattcatct acacataaca tatataaaag caagcaaaat 60
caggatgttt tcctcagcca ccctttccac attttgtgca gttttagtga actataaatc 120
actgacttct tcaggcctaa aagagaaaag atgagaaagt aagaagatgg aggcttggtg 180
agtggatgct cagagtttca gtgacattct gagcagactt gtctttggag gagggcagtg 240
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acggttccta agttattggg ataagtgatc cttttgagtt atgaacatat tggcagcctc 420
tgaatttagc tctttcaaaa ggggtaggac aaggataaga ctctgtatgc cactgggtcc 480
ccgtctnttn agcctnaant tcaacccac ttactggctc tatggcctgn gnaange 537

<210> 8554

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8554

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atgatttttt gttgtgggta gacccttaca caatcaaag aggttaaaaa aaattgtcag 180
agtggcccca gaccaacaac aggatgacag tagcctttgc ccatacagag ataaaattta 240
gtttttgcag tcctttccca tagagattgt atggcagtag ccaattctat ggcctactgc 300
catacaacct gaactgaagt ccagaaagtt taggtgactg ggccacagag ctaattactg 360
gtggagccaa gaagagaaat tatacccta cctccttgcc cactaagctc cccattccag 420
tggggctgct ttctggctct tttccatgat tgggcttttag tagctgncat ttccttcagt 480
gtncagaag tattttcttg gcctttcagt aaagcttccc aaagtttgct gngttccgcc 540
ttaacttgta anttggcctc cntgntaaac atttttgaaa acg 583

<210> 8555

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8555

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cccatattcg agcctaagt ttctttggga aacaactgag taaagaggat gccaaccccc 180
aaaagaaact gaagataacg ttctgcccag tgggaccgat gatcatgcta taacactcct 240
tttgtctcca ggaaaagctg aaagcagctc tagctaacca acccccctct aaaccccctg 300
acatacatag ggcttccaac tccagcaagg gggccaacca acccactcaa atcaaaaacca 360
aaaactaaat cataacagta aaaatatgac cagcaaacaa cgaaagagga tatctctggt 420
cccacagttt cctacggggag accagatggc tgatttctgg cattctctgn cctggagccn 480
gaaaattacn ccaatntccc ttggaentaa ggtanacctt gnggaccaa gccaa 535

<210> 8556

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8556

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atgtttaaat gttgtttcct taatatcatc aaatatccag ccagagttca aatttgcttt   60
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ttcatacatt gcactggatt cacacgtctc aagtatcttt caatctccag gcttcccttc  180
ccttcccttt tcctcttgta atgtatttgt tgaagaatct aggtccctct gtagtcactc  240
ctctcccat tcccagcccc tggttaaccac ttacctgttt tctgacccta taattttgta  300
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aaggcccaaa cctctaccct ggccctcctt ctgctgtggc ccaactgtac ccagagctgg  420
gctctcccg tctcctgcct gttaatccta gaagtgggtg ccgaggaggg agaaacagga  480
agganggagt tgggganggc aacttggtac atggacaaca aggctgttcc acttcancaa  540
caagctttgg ggtaacttng ntccaaattg a                               571

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<210> 8557

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8557

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cctaattgtc gcgatgttgg tcttttgaag gaggcccca cagagccgag cttgcttggt  180
tatctgggac tgctgctcag tctgagtagg ggagggtaat gaaccagtca ggcctcctcc  240
tggaggtgcc caaactggc ctagtcccca aggctgacga aacatggtct ggcctgacct  300
caggacgtgg ggtgaggagg aacactgggc ataatatagt agcggaaca ggcaagcctc  360
tatgggtccc tcccccttag aattttagg tagggaacga ggaggctaca gactaaattg  420
cagaactatc tgcacctggg ccttgagctt ttncctnact nccagtggag ccattctnng  480

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gactgagttc atgangacta ccanaaggtg gcaagttcaa tctggncctg gctt 534

<210> 8558

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8558

gacggtcttg cttgaggttt atcaattaat tgatcttttc taataaccag ctctttgntt 60
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atcagttctg ctttatgtgt ctacaaaatt ttatgttggt ttcattttca ttcagttcag 300
tgcattttta aaattttctt tgagatttcc tctatgacca tgggttataa aatattgttg 360
ttcagttttc aagtgtttgg tgattttccc attatcattg gtatttattt ctagttcggn 420
tcttttgngg ttggagaaag tacttgtagt atttcagttc ttttaaattg gttgangctt 480
ggtttaatgc ccanggncta tccttaaagtg gggggtccgn gagcccctgg anaaactggg 540
ntcngccggt 550

<210> 8559

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8559

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ctctttttgt ctactaagat aagaagtctg ggctaggctg aaaaactcag aatccaggtc 180
tggggtttcc cagtactatg ctccatttc ccagtactgt gctccattt cccagtacta 240

tgctcccatt tccgagtact gngaactccc ctttcccagt actgtgggct cccatttccc 300
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 cccagtactg tatgcccatt tcccagtact gngctcccat ttctcagtag tgtactccca 420
 tttntcagac tgggctccca cttttnagta ctgggctcca cttccaagac tgggctccat 480
 ttccaatact gggctccatt ttgcaagctt gganccccat ttccaagacc ngggttccca 540
 tttcccagac tgggc 555

<210> 8560

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8560

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 ggctgcatga aacatacttt ggaaattaaa gtgaactctc cacttgggca taatgttatg 120
 tggncacatg gattggctta aaagggaac aagaatactt naacatttga tcaacagtag 180
 gcagttgctg gacatttttag aaaaaggaga aatccatttt ttgaccatgg ctaaaccatgg 240
 ggaaacagca tcacattttc ctgaaccacc ctaatcccgg cccctcaaga tccaccaggt 300
 ntgcaacccc aaaccccagt cacatacatt aaatctacac tttattttt tagntgtaaa 360
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<210> 8561

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8561

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tgtgatgaaa caattaaaat cccatgcac cctggccctt cctccacgtt gcccctcaga 180
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 ccttggtttt gaagtggccc ctgctggtac aggaacaggg tgagagtnaa agttaattaa 480
 ttaaagccac atgctttaan gnnaaaaggn nccn 514

<210> 8562

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8562

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 caaaaaaact tttaggcaca agatttttaa aataaagaat gagacaatga aaccaagact 180
 ggaataacag aagtaacaaa aactcacatt tcctaactct tcaattgggtc ttgncttcca 240
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 ctntcaaata ggaaaataag gattttggaa ttttcaaggt ttcctnccac ccaagcacat 480
 tcccnent ttaccctnc nttggaaaaa tggg 514

<210> 8563

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8563

cattggaaac ttaactgatt ctttattcca actatcaatt ttataacttg agcccaatta	60
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ccccacata atgccttcta acaacatctt cactaacttg aaggtgatgg gctaaatcca	180
cagctagagc tggccaatct tggcttttcc caaaaggagt ggggtgtggc tcttctgtgg	240
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gcttcaccag tgggtagtgg gatgtgcttt tggttaaggg ccanttcct ntggaaattg	540
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<210> 8564

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8564

caccataang gcnccactaa anggttttat ttanaacctc agcagcctgt anaggetaca	60
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aataacttct atcaaatnta aaaggaggc ctaggatntn caacatcttt gctttataaa	180
gatgnccta acatgaacta acttgtcaac ttanactnt tacagcagct caaacagttg	240
caaaanfaat gaacatcagn gatttctggc aataagtctg tcagtntaa nagagtaaac	300
aacacttttt taaagctaca ttctagtctt tcttcataca ctacacataa gaaagaaatg	360
caggttcaaa aataaatcac caaaagctt ttccatgtcc ctgagactta accttcagtt	420
caacccaanc angagataag ngtnctcaa aaggccttct gaatctcaag aatctggttt	480
ccaacttгна cttttntaa ggatagncaa taaggttcct taaaaa	526

<210> 8565

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8565

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attttgaaaa gtatttactt agtttaaata aattaattgc aaataaaaat taagctacaa   60
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agtcacaaag catgtgacaa tctagaaaac ttcaaaatca attacatttc ttgaaaaag   180
gggtaacagc agttactgat acatcacacac taataaactt ataatacaag tttcctgaca  240
tgcatttcct gagtgaaccc aaatgatcat tttttaaac aaggaagttt cgacagttga  300
agtaaaataa aataattcat ggcttctaag caacaagttt tgntttttaa aaaccaaag   360
aaaattcaga acagttttgt aataggataa attaaaggna tgctccacat ataaaacttt  420
gctacagcag ttaagtatta tacacttttc aaactaaagg gaaacaatca aaattttaaa  480
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ggcn                                                                    544

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<210> 8566

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8566

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acagaagtaa agtttattac atttgaaaca atacagcaga aacctcaaaa gtttactcat   60
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tcagaagttt gaatttgaaa tgaaatatga aggtagtagt cagggaagtc acatcagagt  180
gccttgtaa atatccaaac aaatcagcac atacctcttc cttgatacag gaggaaaaaa  240
gtgattctaa atatatccaa gtgaatgcag aaaaatacat tactatttga ggcagaccat  300
gctaaaatat aatttacaat gattagtttg cacttaagat ggtaataac gcatttaaac  360
caatgaaatg aagggttaagt tgaattttgt agtatttgct cagtctctgt ctaaacaata  420

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gttcattctga aaagtttggg aaaagccaat acctgatctt ctctttatgc ttatcatttc 480
tactggcatc ttaaattgcaa accaaatcaa tccgcatcag aattttttacc ttttaaaatg 540
gaaactaatg gcn 553

<210> 8567

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8567

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ttccaaacct aacaaaaccc cagggttaagt cctcgtgctg ggcctcgagc cagcaaccct 180
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aaaacaggct cctctcccat ctcccccttc acagtgacaa aacacaagcc cacatcccag 360
ggcctggagt atttgcattg atttgcattg acggcaacac aggtccagct aaggcctttt 420
tctacataaa gtgacatcag tgcanggctg gggaatttgc tctactgggt gaaagatatc 480
tgaggggccc caaccagnn ggccgagncc ccttcaggna gttantacc ttggaacttg 540
ggctggccag c 551

<210> 8568

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8568

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cccaaggatt tcaggaaaca cagnggggca cctgatctag cacacattca gagggtaggg 180
 aggggaaggg atctagctat actctgggca tggagcaggg aaggtcgtcc ttgctatgga 240
 ggaaaggaga gaggaaggac agaggaagag tggccccca tctcatctcg acaatntcac 300
 aagacaggag tatatcggga cctagctacc agggagggat ggatgcaaga agggattcca 360
 ggatctaaca gaccttgac actctggatc tactctcaag aaacaacctt ccccagagaa 420
 tcaggatctg ggggaaatgg nggngtcag ccaatctnct ttagagaccc ccaaagcaac 480
 ccnggtttg gggttcctgc ccttccccca aaatgnggga aatgaaaaag tttggccatg 540
 gggaat 546

<210> 8569

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8569

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 ctttgtttta gttagttacc ctgtttgcat atagtgcaga aaaaggtctt catgttagca 180
 ctatgtacat taagaagaga tccaaattac aagagaggca gataaaattt gaattcttta 240
 agcattcatt aaacgaagtt ttggagtaac atccacgttt atcttccttt cactaatcac 300
 gttccctgtt aagcacatca taacaacagc acagtgaagt gaatgatgaa ataagagcat 360
 tttgatacac tagaaaacag tgctcagtga gacatttaca ttctatttat atgattaaac 420
 atttgatcat acagtacctt cctacaggat tactggctaa ttttggggtg ggggttatac 480
 tattagangn attacttacc tggaaacttn cttcctaata tgcaaccttt ggggccttta 540
 ttttatgg 548

<210> 8570

<211> 261

<212> DNA

<213> Homo sapiens

<400> 8570

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cacatgaagn ctncatttat tctgggatgg gttagagtaa gcctttgagg ctgccatcag 60
gctggctgag ttgntgcca acattgtatc cagcagtcctc aggcccgcac agtgcacanc 120
cagcatgggg ctnacaggtg cagatggaat ccataagctc ccancntgc tgcaaaggcc 180
aggcctaggg gtccgggtac atgcantgag tccttggggc anggccagcc ctgctgacta 240
cacaancang gttggtggng a 261
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<210> 8571

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8571

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ataggtacac gtctattttac tgcacaaata tcaaagtgtg acatcgatgg taaaaagttg 60
taaactggct aacagtcac cagcacttaag tacaatgggt ctatactgac acttccattc 120
tcattttaag agcttatata tttaattgat gactgctctc ctcatcaggg acatttaaga 180
tatggaaaag gcatttatat acacacgcat gcatgcacat atgcttaacc ttacaaactg 240
aaaaagtaag cccaagcatg attaattaat tactttgcct ggatcaataa atactagtct 300
caaatgttaa gtgtactaat aaggacagaa gctatcagtt acataaatta tcatgttgct 360
acctactgat gctccatttg ctaatgcatg ttagtcagtc tgtagacttt atccaacaca 420
tacatagaga ttattttttt gggtgnttga aattctcagc agatcaacag atctcttttg 480
gacatttctc ttccattact nttangatga aaatggaata cctnttaaata taaaattttt 540
aaatnccngc c 551
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<210> 8572

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8572

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ccattgaaag aatatttatt ttgcagctgt taaaagacat ttttcctaa aaaaagaaaa 60
gctgtgcttt acatagcaat cttataaaag aaatgctaga atcagaaaac catcatttta 120
ggctgggtgc agtggctcac acctgtaacc ccagcacttt gggaggacga ggcagggtga 180
tcacttgagg tcaggagtgc aagaccagtc tggccagctc gatgaaactc cgtctctact 240
aaaaatataa aaattagcag agcacagtgg cacctgcctg taatcccagc tactcaggag 300
ggtgaagcat gagaactgct tgaacctggg aggcggaggt tgcagtgagc cgagattgtg 360
ccactgccct ccagcttgga caatagagca ggatttcgtc tcaaaaaaaaa agagaaaang 420
aaaaccatta ttttgcaata gccaatgtta taatctacac aggcacagac tatcaatgct 480
taaaatcatt ttaaaaggac atcttaaggg gtaattnccc gaaatttgga tttttgaacc 540
cttntgtaat naaaattcn 559
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<210> 8573

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8573

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ggaaatcaag ttttgTTTT atagtaacag aagtagacca tctagaaata tttcagttta 60
tttaaattgt taagtagaat atgaaaccga attttagct agtaccagag aatggactta 120
actgtttggt gtttaatgag aacagcttct acacaggatc ccaagagact tacagaaaag 180
gggcaaagcc ctaatatata gcaaataaaa ctcatgtttc aaacagatta tacaaaaatt 240
gatttatact tcatttcctt tttttgatat ttagaaagtg cagatttaac aaaaggtagc 300
catatccttt ctatgtacaa tgccgattat aattatgcaa aactgtcagt ctgttatcca 360
aaaatcccag tgtttagctc tccaacctta agtcatggaa ttgaataaga attaaagagg 420
gttaaaataa aaaagctaata gccacattcc agataaaggg aagcaccaat acattaatct 480
aacaccagta gggttaacct aacntttcaa aagcttaaca tcattcatta tatttttagt 540
```

ggaaaatagg gatnttc

557

<210> 8574

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8574

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ctttttgaca gagttttgct cttgttgccc aggccggagt gcaattgcta tggcgtgac 60
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ggattacagg catgtgccac cacgcccagc taattttttg tatttttagt agagacggga 180
tttctccatg ttggtcaggc tagtctcaaa ctctgactt caggtgatcc acccacctcg 240
gcctcccaaa gtgctgggat tacaggcgtg agccactgcg cctggcccgg ttttactttt 300
aacaagcgtg agagcatctg ttgctgagct atgtgggcaa catgcatgtg aggtgcggcc 360
ctgccctcca ggacacgcag cttcatgagt agagaagaaa tcttatccaa gggcgaagta 420
gcaagaacac agcaaaccac cgcacacaga agggcgatcc acaagtcaaa ctggcanatg 480
gaaacagctg agggctctta ntggctcca anggaaaagg cgggctantc tgagaactga 540
ngcngaaggg acttgctggt t 561

```

<210> 8575

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8575

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gattcaaaca agtataattc tcaagttatc acaaaatttc ccacaaaaat ttacaatcag 60
caaaatagtt tccttatttc tcatgtatca ttttcatata attccatggt ttactaata 120
ttatatgtta caataagcct ccattagtcc ctcaaaacga tgatataaat aagtctgtac 180
aacctagcat agagtaaaaa actgaaacca agattcccaa cgtttttcat agcagccggg 240

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cacactttgg tgaccccaac gagaaccctc tcggcagcag ccaggagctg ttcaccttcc 300
 agaagcaggg cctgtggcag cctaacaggg agaggccacg gggcccaaaa acgcaacacg 360
 tctcaaggca aacccgaggg aggaacttgg tctgggagga agagagaact cgctcctcaa 420
 ccaccccaga cactggagtg tcaggaaagc actgagctgt tggggcacac tgnccagccc 480
 ggnccagcaa gctaaccagt cacagnttca ccttcaactt ttcaaggagc aattttantg 540
 gggaanaacc ctt 553

<210> 8576

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8576

gtttgttctc tagttttatt atttgtcaat tttcccaaca caggaactat aactcatttt 60
 gaggattttt ttcagtgcatt ttcgcagcaa aaatgaacaa gggaatcatt aaaattgttg 120
 tacacaaacc aactcttttt cttataattt acaatttggt gaaaaaatta ttgttttgct 180
 gttttcatcc tactaacctc ttttaacagaa cacaatttat cagagcacia agcttaaact 240
 tcttatgatg atgcaacaga cacagccacc tacaatggct gataaacaac aggtatgtta 300
 cacacactga ttggaagacc atatcagaaa aaacagagta aggcaccact cttgggaaat 360
 taaggtagct tgcagtaaca agtgttgagc accataataa gtaggtgctc aataaataca 420
 tgaatgaatg atgaaagcca taattagctc tattctttta attgccagca attcttcaac 480
 ctcaacaaaa atacttattt aaaaaaagga ttgnacctgg atccacttnc tggacntttt 540
 ttccggaanc cttttantt 559

<210> 8577

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8577

catctttaag attctatitt tctagaacca cttttggcac caaaatctgt atcagtcaga	60
ttcaactaga gaagcagaac cagtagggga tatattgaga tttattgcaa ggaattgact	120
tcagtgattg taggagctgg ccagtcatgt ctaaactctg tgaggcaggc tatcagaagg	180
gcagactgtc aggaactntc gccaagcact gggctgctgt cctcaggcag aatttcttcc	240
tcagggaac ccttagctct gttctttagg cttcttgact aatcaggtea ggctgaccca	300
gattatctga gataatctca cttacttagt caattgggaa tggacttctg tcacatctac	360
aaaatacctt cacagaaata cctagattag tggctgattg aattactggg tgactgnggc	420
ctagctaagc tgacacatnc naagaccatt cgaccaccca caagccttgc tgaagcttaa	480
gggctttngg acaagcctta acctttttcc actgggggtcc cgggatgggc agnnttattt	540
ggctnaacct aaaatccc	558

<210> 8578

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8578

gctcggngcc attttattta atgcaaacac tagacagttt acaagtcaca cctggacaca	60
agcacgtgaa cagatgtaca gggaattctg gaattttgag atcagtcacc atttcttct	120
cagggccctg gcactgaacc ccagcccctg tcccagagcc tcccctntgg gtcccacccc	180
anaagccacg cacacctcct tccgcccagc tttatctttc cttgagctgt gacttcaccc	240
agcatgtgct canagttgtt acaaattttc tctgccaaat taagctgaca gagattggcc	300
actttcaacc agtcctttca gtccactgtg tctcccctct cgcttgggac aggcccatgc	360
tggccagtgc aaccttcaga tagacacatg gtgaccagag cccgccaggc ttntgcaggt	420
ggcagtgtcg agcaagtgtg aagatgtctg tgggaaggag aagcttctgn aatgaacgtt	480
ntggaaacag aaagntnaag ggnctttcan gcattttcag gn	522

<210> 8579

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8579

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aacagccttc accatctttt attcattctg ctgtgataca actaaaatgg ccagtaaatt 60
ctcccctggg tctcaggtaa cagttttcca aaagtgaagt atcactttct ctgcacagtg 120
gtgaaagccg gcatttggat gggctggatc ggggtggacag gctgaaacac tggcttcttt 180
ctcacttcan agtgtgtttt cactgcaggg agcagctgat tccttttgat gatctgtaag 240
gccagctgag tattaccatt ctgcagttca aggtagactg ccagcaagat ggcctcaggg 300
ggcacctctt taggatggat cattgaagcc gcctggtgga gacactttcg ggctttgtca 360
tattcgctcc tcaggcagta agcgtgcca aggttgaaca gcatcacagt cctggcagag 420
ttgacggaac tggggtagca ctgaggggcc cgcttaccag angattccat tggttcattt 480
tcaccttgct ganccttggg cctgctcatt tgaagaaaan cctaaggnga cattagtgac 540
atttttccgg g 551
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<210> 8580

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8580

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gtgaggttga aaagtcattc atacagagga ctttaatgag cattcagatt tttcacttgn 60
gatataattt acatacaaaa aatagcataa caaaaatata ttggaatata gtatagatac 120
atttacataa acattgcatg aatatcacag tggatatgta gagaagggtg ataaacctta 180
aaatgtaaaa tatcaaagga tcaaaaacat ctaaaactga cctggaatga attatttgta 240
attttaatat tctataaatc taagtacctt tttatgttaa acttaaaagc attataatgg 300
ttattaaata gaacaggggt caagcaaact tttcccagaa aaagttagat agtaaattatt 360
tcaggctttg tgagttacag agtttctatt gcaactaatc aatgctactg ctgtagtgca 420
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aaaccagccn taggatacac gtaaaccaat gagentgact gggttcata gaacttattt 480
 taaaaatagg cacaggnccg aatttggtn ctaggaccata nttgntgacc tttnaacaaa 540
 naaa 544

<210> 8581

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8581

actttttaaa agttttattc agcaataaga ccataatttt tcatatttaa ggagtatgaa 60
 aaatttgtgg agtttttaaaa gctgaataca tgtagcgttg gatcaaggca catacaagac 120
 tggccaaagg gcgtacaatg cactttggtt ttttgttgaa aaaaaaaaaat catggcaaca 180
 gaaaagtgat atggtttttc aacaagtaac agctcacaat tcagtaggaa gctagaagga 240
 aatgtttacat tacgagttca ttatataata tctggaaaat tgtgacagta atgggcagta 300
 ttcttgatct ttgtaaaagt aaattgaaca tttatgtcag tgttaaaacc ttgacataa 360
 accagatcta aatttgatgt ctagtattta tttttcttta aattatctct tatttaaaga 420
 actactttct ctggaatggt gaagggaatc gcttataatt acnttcattt ttaatatgcc 480
 tnaaagggtc tctgacatnc cttatgataa aacctcttaa cccttaccaa ttttgggggtt 540
 aaaatcactt tttaaaaatc ngganggggtt ng 572

<210> 8582

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8582

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 ggggcatgtg caaacaacag aaagggggaa gtcagtcctg ctgtgggaag cccacacatc 120

agtggtgttg agcaaagttc acgaaggcca tgggctgact gagctgtggt gtacgaaatg 180
 acattcagct aatactggac tcggttcacc tttagacacct ggagaggtgg ggaagccagg 240
 ggggtggggag tccagctggg gatccttgtg tttaggaagg gggcggccaa gggatgagcc 300
 tttgggagag gccccgtgtg gcaggagggc tcatttcaca agccaacagg cctctagctc 360
 gccgctccag gtggatgttt ggtgacctga agggcccttt ccagtccaag ttggctttgc 420
 aatgggaggg gtaggtgcan cnagggtncn anagacagaa atcctcttta aaggaaaaac 480
 cnaccaccna acn 493

<210> 8583

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8583

cttttttttt tttttttttt ttttcttggc aagcattcat ttattcacgt aacataagcc 60
 agacactatg ccaggggctg gcgatacaga aatgagtaag acatgatccc tggccccctcc 120
 catccctgga atgtctacta ggaagaagct gctagaaaaa gacaacatgc tacttttaaag 180
 ccaagagggg ccagtctccc attccagctt ggtacacact gaacacattt gaggcttatg 240
 actggttctt ttacttacaa atattgttta gacacatttt caaatgtcac accaatcaat 300
 aataataagg aatggatttt atctatattg acagttcttt naaccttaag agtgaactgc 360
 tacaggtaag attcantcac attttccagg agaaagctnt tngnaccaa atgcttnggn 420
 tatctaata 429

<210> 8584

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8584

caattctcac aagatttatt tataaataat gcaataaaaa tactagtaag ctctttatgg 60
 agttagacaa attgatacaa aaattcatgt agaaaaataa acacggaaga atagctagaa 120
 cacctgatat tctagtaaaa gaaaagccat aaggggtgtc tactcctatc acatattaaa 180
 tcattctata aaatctctgt aattaaaact gaaatattga cacatgaata aacagaaaga 240
 ctagtggaag agaagagaaa tctagaaata gacttaagtc cataaggaaa atcagtatat 300
 gatgaagggtg ttatctgaag tctactggagc atagatgggc tctctaatta aatgggtgctg 360
 gacaactggg tggccatttg gaaaaaagggt aagattagaa tccattcctc atgccaatnca 420
 cacaattaac tccaaattta aagaagaatg acaattgaag aaagtgtag agaattcctc 480
 tataaactca gtnttgagag agcnccgnaa acntaaagga ctgatcaatg gnctccgtaa 540
 aaaattaaa 549

<210> 8585

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8585

gtgattcagg gccgagcagg gctccctgga agccccctct tcctgccccca actttatttt 60
 gggttctagaa tcattccagt tggcataccc gggtcccacc acggctgtcc tgggcacaca 120
 gttaacatgt catgcagtta gggggaggga gagaggggag agggcagggg gggagtcagt 180
 ggccctgcacc gcacagccac tgggttagag aaagtcgggg tctcccaggc tgcaaagcct 240
 tgtccagcca tgtgtctcct ggccctgggc tgacctcctg ctgtggccat agggtagaca 300
 gcctggcctt ggggctgggc catggctgtg tcaggtaggg aaagccacca tcctgccttc 360
 agtcccctgg gcccttggtc tanccctct tccccatat cactggggat aatttgnttg 420
 cctgggtctn catagctcac cagttatgga ccaaangaac aagggcance accttgaggg 480
 tncatgctgg caccttgnngg tggccnacc 509

<210> 8586

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8586

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cagattctga ggtctgtttg tgtttaatca gacaatatgc aaagtattta caaccaattc   60
tggatacccc cccaccccc gcaagtctgg gccttggaaat ttcggagccc caggcccggc  120
ccagagccag ggggtcccca ggcctctgca tagtcatctg aaatctacaa aacactgtta  180
aaaaaaaaaa aggacagtat taagacacct tacacaaagg gccttaggca gttggagagg  240
gatttgagag ctgctgggg tgagtggcc cagatttgac tggaatggac gggagaagac  300
ttgggtaata aagacgtatg aaaggaaaag ttgaaatttc ataggcaggc actgcttggc  360
ctccttcccc actggcaggg cctggctggc tcaagaacct ctggcagtgg gaatgttatt  420
gctatgatga gggggccatg gtgaaatgtc aacatgtttg ggggacggac cggggggaca  480
ttttacatgg taaatntggc ccncatgaga cccccccact tccancttc ccccnncnccg  540
gg                                                                                   542

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<210> 8587

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8587

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cagtatacac tctcttttatt atgagaatga aaccaaataa taagcaaaat acatcaggaa   60
tttcaaattg tactgcaaag aagggtcccag ctggtctctt ctgggagtga tctaactaac  120
ttaagctgac cctgtgactg gctgaggata atcccttctg tccactgcac cgtgcaatgc  180
cacaggtcat gagatgggtca gticctcttg ctctgtgtcg tctgaagcaa gtcgaggccc  240
tacttctggg tccgcccttc ttccttgggc ttagatttgc tgggttagta gtttgcact  300
attgtcaaga ctgtactgtc cctttaaggt accacatgcc accatagctt acacagcagt  360
cctttagtac tttatccacc tctgtttac tgagatcttc tccacactct tgagtcaacc  420
cgagactgga tcatgtttcg gcgtaccgg taatttttgg aaaaaatttc aagcaaaacc  480

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tgatgatgct gatcactcat gctcncagan ttccaaangg ccaaacacct ttgntcatc 540
cggggaagca gcaant 556

<210> 8588

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8588

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cgacaggcaa gttcacattt caattaatgt gaactgaaca agagttaag gtgattttta 120
aataccttcc acgttagaaa atccttcttt cttaaataag tttcatata aagccaagtc 180
cttgcaactt aacgacgggt ttacagtctt aagtgatttt agaaagtgtc cttgtttcac 240
tgtagttgcg tctagtccat tttcttgag agccagcaaa gcagcttctg tgcanagggt 300
tctaagatca gctccagaaa aaaaacaggt ttctgctgag aggttttcta aggagacatc 360
angccctatt ggcatgggtt ttgtcagact tttaaaatag aaagcctgcc ttgggatctg 420
ggagggtgggg atatagatga tcttatctaa tcttccangt tcgtaacaaa ncagtatntt 480
aacacatcag gtctatttgn tgcttgcaat aatcntgaca cttnnggtta aaaaacttnt 540
tgaa 544

<210> 8589

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8589

gcaaggaagg aataagggga ttattgaaa atgaaagtac actccacagt gtgggagtgg 60
gcctgagcac aggggctcaa aacgccttct ttgtttttgt atatagaaaa tatacatgct 120
ttctcatcta accgattttt tttttttttt tttttttaag acagagtccc actttgttgc 180

ccaggctgga gtgcagtagg catgatcttg gtcactgca acctccacct cctgggttca 240
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 ganatgggggt ttcacatgt tggccaggct ggtcttgaac tcctgacctc aggtgatcca 360
 cccacctcgg cctcccaaag tgctgggatt acaggcgtga gccaccgcgc ctggcctcat 420
 ctaaccaatt tgggattctg gttggagttc angaaaaact aaagttccca ttactttcag 480
 aatattttna aaataaaaaa tcctgatgac ttgtgangga aaaggaaaac atttnaaatc 540
 ctgactttct t 551

<210> 8590

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8590

accaatcttt atgtatttat tcacacattt gataaaaatg tcacagttag gagtgaatc 60
 attacaatga catgagtaac tgtacagaca gaccccaagt gcagaatcaa attgccctaa 120
 gtcagaacat ggagcaaccg caactccttc gcacttgtgc atgtgtgtgc gctcgcanac 180
 gcacacacac acacacatat tctctctctc tcttatgcac acatccatcc acatcccaac 240
 aattgcaggt gctaagtttg gacataaccg agggactcct ccctgacttc tgtcagggtc 300
 tggaaagaag aagtaataaa tgaaaagcag ctgggactgc tcgatgcac tctcctcttc 360
 caacaatgac ncggaagaagg caagacatac actggggcag ctacttcctt ggcacaaaaa 420
 tgaacaggca acaagaaggt aanggagtgt taagttaatc tcanggttaa accacttttn 480
 aacaccncca aaacagtanc angcaggaaa aaaaaaacgg ggtnccaaaa cttaac 536

<210> 8591

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8591

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ggtattaaaa tgtctgtgat tacttatttc tcagcattca tctggtaact taagcagcat   60
gaagcaagag ttgcacttta aaaaatgaca agaaaatagc tattcattta gtcgacagag  120
taaggcccat ctcaattcca ggatcactag tttctgctta tgacggggtg agcatccgcc  180
agcgcggtga ttgggaggcg cccctgtgtc tttaggctga ggcagtgcc atagctgcag  240
tgcctcgagt ttccggagca accgcggggc tctttcttga ggagtcttgg gaggggccgg  300
tggcctgcct ccccatccta gatcagcgag gtcccaanaa gtgccgtatt gctgcggggg  360
aactgtggag tgtngacacg ttccgaggtt ggcttgacat cctgaggctt ggggtggtgtg  420
aaagggaan gaaagaaggg caggctcccc ggcttttgct ggctcttgct ttttaaggta  480
ggncntggg tctgcanagc natngcaccg gggctcttgc caaccnggg ggnntccc   538

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<210> 8592

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8592

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ctttttttga gacagggtct ccctctgtgg cccaggctgg cgtccagtgg catgaccatg   60
tcccatcgca gccttgacct gccaggctca agcaatcctc ccatttcagc ctcccgagta  120
gctgggacta cagggtgtgca ccaccacgcc cagctaattt ttgtattttt ttgtaaagat  180
agggtttcat tatgttgccc aggctggtct caaactcctg ggctcaagcg atccaccac  240
ctcgatttcc caaagtgtg agattatagg cctgagccac catgcctggc tgcagatcct  300
tcataggttt cttaatctta agaacaaaaa gtcacctgg aaagcaagaa cacatcaatt  360
tggcagtatc tggtcactaa aagaactgta tctctggagg caaagcatgg gctctaataa  420
accccacaaa gtattggccg ctaattccca aatattcctg actggctctt tcacaaagct  480
taaggagggt tcaattcaaa gaacatttaa agccctttgg cttggatagc agacgagnaa  540
ccagacttt                                     549

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<210> 8593

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8593

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ggaattcaga ttttttattt ttggctctta ggaagtagtc agcaaatact gtataatccc 60
tagtagggaa ccatgtcata aaatatattg acatttctgc aacaaagaat cacactaaaa 120
ggaacacatc ataattaccc atagcttcct atcagtgtaa gttcaggta ggtttggttt 180
caaatgggtt atgaaaatac ttttggtttt cagagcattg ggactttgga aatgaggacc 240
tgatcatcc tttattaggg agaaatagcc ccaggagcca cgtctcagca attccatgga 300
aacacaggtt tctttgccct caaaattccg ttcctacctt ctttgncttc cttcccccaa 360
agaaactgga caaaaaaggt cagaactgna ttgntattc atacatttgc gttgatttaa 420
atcattacgt acaatttcta cattggatta gaagaatgac acagggggca gcacactttt 480
gcagnccagc ctcattcctg acctggagca gggcctatgg tggcaaagga cgggntcct 539

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<210> 8594

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8594

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gtggttttaa tagactttat attttagagc aattttaggt ttacagcaaa attgagaggg 60
tacagagatt tcccatatag ttgtgtccc cacacatgca tagtctccac cattttcaac 120
atctcccacc aaagaggtac atttgagta attgatgaac ctacactgac acatcattat 180
cactcaaagt ccacagttaa cattaggggt cactcttggt gttgtacatt ttaggggggt 240
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cctaaaaatc ttctgtgctc caattattcc tccctccct ccccccacca ctgcttttta 360
ctgtctccat agttttgcct ttccagaat acatcccagt gtcatatagt tggcatcatt 420
taatatgaag ccttttcana ctggtttaat taagaggctt ccnttaagtn ccctgggaac 480

```

tttttaacct ggnnacccaa aatggcatan cttgattnag cccctgaata atgactactg 540
caccacaatt ttn 553

<210> 8595

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8595

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aaaaatgtgt atcatatata actttcaaaa atttccatgt tccatgagaa ctatgtaaac 120
antgcaaaat gttncacta cgtaacaaaa gaaaatcagc attcccacat agtattagga 180
aaatatnngg ataatctgaa tttatagtaa aacaaagtga tctgaatttg tagtaaaaca 240
aagtgaata ttacaaagca gtcttgtcat gaagtagcct tatataactc agaagcagca 300
catttcatac tttcaaacac tttggtataa gtgaaattaa tagaaaaca aaagaagaag 360
aaaaaaacct ctacttttgt tttcacatta ttggacttna gcaacaaggc aagtgcacag 420
gtanccttgg atgaccaaaa tggaaaacct tntnactnng cttggtttct ctttctggna 480
aatgggccgt gcttaggaaa agcggtttcc caaggacntt ttggaaaatt aaggnggcat 540
tttcactt 548

<210> 8596

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8596

aaagttttat aaaaaactat ttcttgttct ttaagtaaag aacactatac aaagaaaata 60
tattngnaaa taccacagag acatggnttt ttttcccct tgaaagatat gtccatccta 120
ggaaatgggtg gggggtggat gtgggggggtg cagagtaggg cctagtcctt gttgncattn 180

ttgngngngn tattgattct ggaaggaccc tcgggtgcca atgaggctct ctaagccata 240
atcttctgaa tgcagggcat gcagctcctt aaaagacana cagccctggg agaaaganaa 300
gggaatatgt tctgaattca tttgactcag tttctcgcct gccaaagaaat ttcttncaag 360
cagtgatggc tccttactca ttcngagatt aagaangatg gccaatTTTT caaaatcaaa 420
tttgttcaaa acttnccatn gtcccccagg gatcaaggtc accctccttn attcngcatt 480
aaaagtnttt catncttccc gttcttctcc ctctntta 519

<210> 8597

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8597

ggatttgttt ctctttttat ttaggtactt tctccaaaag tgattttagt ttgtatggaa 60
aatcttctga tgctttgatg gtacatatc ttattaatgc cctcacatta gaataactat 120
tttcagaaca taaaattgta ggttcaaagt ttttttcagg ttcaatttca cattcttgag 180
ctaggcatgg tactgatggg tttcaccata acatacacca atgtcctttt gtctgtgggc 240
tcccatccag cctgggtggc gaagtcact acaggtaaga ttgaccaaac ctctgaacag 300
gactgaaaaa aatgttatct tcagaaaacc agccctcttg tacactgctg ctgtgaatac 360
aaattgatta acttttctgg atggcantct accaatgcag atcaaacatt ttaaaantcc 420
ntttntttt gaacnaattt tttttcngn 450

<210> 8598

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8598

gagagagaaa ataattcact ttatataaat aacagctaag aacaacatac tgtgaacagt 60

ttccagagtt tgaacattca gcacaatcaa ttcttacttc ttgggaaaaa aatatcttac 120
ctatcttttc tgttacagta tgccttcttg gagaaaatat tttagtggta acatcatttt 180
ctggggcatt tggttaattt tgaagatga ttatgccaca tgaacaaaaa aaaaaaaaaa 240
aaactggcag gaggaggagg gtcctaggcc attctggaag caagctgggt tttgcattat 300
tcagagtcaa ctattaagct gacttatatt agaatggcga cagataagag gcaatgagtg 360
acaccaggac atgcacagca cacagagaat atggntact cttggcttcc ctgcacagat 420
taaacataag angcttggtg gaaagacatg gggaaaggng ctatnggggc caccntttgg 480
aagcatattt ccagngact tgggtnttgc tatgcaacct ctggaccaa aactgggaaa 540
ggcccccttc cccacag 558

<210> 8599

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8599

aattttgggg ctttattata atttttcttt ccaagatgct acatagtcaa acagaactgg 60
gttggctttt tatggcataa aattaattca cagtcaaact ctcaactagt actagaagga 120
ttcgtgaag agtttctctc ttcccttgct cccacccac aactgctggt gccctcgctt 180
ctaaccctct gcagcccgat ccatttgtcc tgactccagg ctaggtcccc aaggggaggt 240
caggctcaga cttggacctg ggcgtggaa gtgtgagtaa tggttgagag gtggtataag 300
aacaatctag aagactgact actcttcatt aaaaaaggta acctagagtt gactgtcact 360
actgagaatt tccctcccta tgacagttgn tatttactga cccagaaaaa acacttctgg 420
cagctcttct tcagcatccc aataaacccc accttcacat gacagactnt tcagaaacag 480
aggaccaca gccttcagca gcaatnccag ttaaccaaca gagttaaca cacgcaacat 540
taactgnctt ttgggaaa 558

<210> 8600

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8600

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caaactgaga aaaagcagtt ttaatagcac acacacacac acattcatag gactttaaca   60
agatgtagta taaaatcttt aaaaaaaaaa aaaaggaaag aaaaaaatct gtatttactt  120
cctaagagct ggtggattaa ctggctgaca ggactgccca ggaaaaacaa atgcacagat  180
aatgaggtgc gccgacactg ttcattgagta aggaataacc atggatcatg ctaactgctc  240
tacgtgcccc gccgcctgga ccctactgtt gcctccttag cgacaaacca ccacagtcac  300
cccctaattc tccaactcag tagcttgttt aatgggctac ctcttaaaat tttcattttt  360
aatttaaaaa ttactctngg nttaaagacn cncacnttn ttactggcca gtcccnacca  420
attat                                           425

```

<210> 8601

<211> 458

<212> DNA

<213> Homo sapiens

<400> 8601

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caatgtcaaa atgtgtactg cactttataa aagcatggat aatattaaag gatcacaaaa   60
ggcagcatta gcattctcta tccaggtatt attaaatctt tttatcccat gccccctca  120
aatataggag aattattatc tgataagcct gaaacgactt ttttaatacc ataacctaaa  180
aagacacttc ttacaggtgt atgcaacttt ggtcagcaga aacacaatac gagcctctgg  240
cctagctaag gcactctatt ctgaaagtac ggaaaacatg cacgtatgct ccttatcatg  300
gcattgctcc ccaaaggca gctcactgta tgctggggag aaaggctggg gcatgaagtc  360
accacaata tcatgcataa gcctgaaaga cctttcatac tttggaaatg ttatagtaat  420
tggcatgaca taaatgcnca cagntntntg nantgang                                458

```

<210> 8602

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8602

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caacacaatg gccctgcctc ccaccgnttt atttctttcg gtttcggatg caaaacaaaa   60
aattttaaaa gaaaatgtga cttcaaagga aaagaacaaa tttccaaaga cttggggggag  120
tgaaggcaga gcctgggtgca natggacgag gtctgcagac ggagggcaga ggtgggtggaa  180
ggggccaggg gcctgcaggc ctccccctgg aactgggact ggtctcggtc tgctgacgtc  240
agggtcagct cccccgcgga gctgacttca gcagcccaca gctgtggggc ttcagcagcc  300
acaccagccc agcccagccc agctctcgat acgtttggtc tttcatgctg aaaaataaat  360
aataaagcct gtcccggtgc tactgcctcc cccaactgca cagacgccag cctctaggcc  420
tgactgccaan ggaggtggaa aactggcac cagcccggca gcccctacan gccccccana  480
tggtgccta atgcctctg aaactgcana tncctcaact tggccttcg gccttgggnc  540
annt                                                                    544

```

<210> 8603

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8603

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gattgattga ttaatttatt atttttaaaa acttggaat tcataaacta ggataatcac   60
attctccttc cccatctctg ggtagtgcca tcattttaat aagcaatgct caaataacag  120
aatggaacct ttatcatggg gatggccctt gtacaacagg agtacaaagg gcttacaaag  180
tgagtagact ggctcaaact aacaatcacc tttgctttgt tttagcactt tgcttacaag  240
tgaatgggct tctagggcta agttattagt ttcaattcc ttgtaatttg ataccaaaac  300
atatcaaaaa taataagcta aaacaatatt caaacccata ttttattggc tttattacac  360
acttcaatat ttacaaagtt aaagttaa at gaaaagtctc tattgtatta aaaaaataa  420

```

ctacagccca aattaaagtg ccctggggca aatcatatca atcaactaag aatcagtgac 480
 tggatcaagg acccaggcca gtctctgngg tacaaccaaa gccggtttat tttggganca 540
 anggttggga ctctatacaa tccc 564

<210> 8604

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8604

gcaagataag gcactttgtt ttttaattcta tcagtctctt tagaatgaac aaaggtctgg 60
 gtcctctgga aatctcaagt ggtgctgcct gcagctttta aaggctgagc acaaaccat 120
 cagagagcca cagtcctaag tagactcctc ggtgcgctct gccacactgt ccatgtgcat 180
 tcagatttct cattaaattt tccacagcat gaccagtggg gatgacctgg gtggcctttg 240
 tgtccatggc cacagcctag gtacccacct ggcatggigc ctccacaggc gcagcgagcg 300
 gttttctggc ccccgctgga gcagaagtg cagcagtga acacgcctga gtgtgggcgg 360
 tgctttctcc tcaccgtcac agtgaatggc gagccctgca catgctgntc tttgatgcag 420
 acccacacag tatagacgcc aggttccttg ggggtttag gaaatgtagt atgtccatcc 480
 ttggtatcct ggaccattgg tctgactggg ctgctttctt aactttangg gcaacgggaa 540
 ctttgaacgt tgtntcctcc t 561

<210> 8605

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8605

catgtgaaac ctgtaacatt ttatngtta aaaatgaaca gcttcagaat agatctaaat 60
 gtaacttttc caaaaaacac caaaaagtnc agggtaaagc acctcctcgt taaatncaa 120

ctttcatng gngatgcacg gcnccaatgt tttgcatatn ccttgatgca aagaaaagt 180
 taagttgcat cctgttttta aaaaaanccg aaacttaaga actgaacaag gattacaacc 240
 acattccaat aaagaaaatt ttccttcaac aaagcatatt gttttgttta tatncaatat 300
 gngaccacca agagtittta tttagtgtta ccaaaggcaa aacattntac ttaaaattaa 360
 attncngatg cntgaagaat aaaggtttaa ngttcaaaga ataattgggt atttaatgcn 420
 ctcaatgtca gtattttggg gcaattttta aaggttttcc caaaaaatgg nctggatagg 480
 ctttatccaa taatngggta agaacnggga aaatggaaac ncctttntnc cttttttnc 540
 caaaccttt ttaaagacgg 560

<210> 8606

<211> 447

<212> DNA

<213> Homo sapiens

<400> 8606

agtagagatg gggtttcacc gtgttagcca ggggtggtctt gatctcctga cctcatgac 60
 cgcccgccctc ggccctccaa agtgctggga ttacaggcgt gagccaccgc gcccgccat 120
 catttctatg ctaccatctc agcatctgtg gtgaggggag ggggtgccact tcctctttgc 180
 ccagcgagag ggcgtactct accccagaga gggaaacacc atgcccacag tgcttggttt 240
 tgcactcagg tgtgcgggca gcacagcagg cctcaccttg cagcactctg ggcacaatga 300
 cactgtccac tggggagctg cagagcttaa cagctggctg ggtctgccct cgggggaagg 360
 gaagagtttg cnaaaaaagg aggccctaag gtgagggaan tttggggccc accnncagg 420
 tttaaagagg aaacctttta ttnnan 447

<210> 8607

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8607

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attttttccc ttgacagtac tttattaatt ttcattccata ttttacttga ctaaaaatac   60
aatgtatgaa aatttatctt taatagcatt ttccataagc tactataaca atttattgat  120
acatctggga ttcagccagg tcttatagta tttaaattta taaccctgc catgcttagc  180
attaagtaaa tcagtatgca agcagtattt aaggcaaagc tttagaata ctttaaattt  240
catttgtaaa tacatagatg caagactggt tccataggaa gtcacaaatc ctcaaacaga  300
aatatgtgtg ttctcgatgt taccctgatc agaaatcaaa cttggaagaa atatttttac  360
attagaaaaa ggactcagta taaggngaaa acaaaattnc cagtgggcta gacatgaaca  420
aaagtattca ttccccaan gcacattctt tatacagggt tttcaaatta nctcctatta  480
atggaaggct tattcattaa atatgaaact atgcctacat taaaaccngg atttggttn  540
aagggttan                                     550

```

<210> 8608

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8608

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atactgcaat gtacacattc ataagaaacg ttctaataac aattagcgca caaaactatt   60
ggtataaaca tttttccaaa aagagaaaac tattgcattt cgtagaat cgcgctctgg  120
gccgaggctc gtctttcttc tctgcagttg gtttggggac agaactccag cacgcagctg  180
tccaactgca gcggctacgt gtttccatgg agacaaactt ggtgtctcaa gttcagggtc  240
tcgaaagtcc cgaatatattg tttgtcccga gagaagagtt ttgactttga agaggtccag  300
gtgggactcg ctgggggtgg ggtgctccgg gattagttca nagggaggtg tctggaagac  360
tccnggaacg ggacgcagca ctgntggttg gacncacccg gatgctgntt tcttgaagtg  420
tgcttgtgac actgacctgt tgacaaactc ttcacagccg nggcttgatg tgacgggnac  480
ttggcagaag tcccacatcc ttctggtgtg gtaaacttct gggttngatt tttgaaa   537

```

<210> 8609

<211> 426

<212> DNA

<213> Homo sapiens

<400> 8609

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aatagagaca agttctcgct gtgttgccca ggctggctct gaactcctag gttcaagtga   60
tcctcctgcc ttgtcctgcc gaagtgctgg gattacaggc atgagccgcc acgccagct   120
gagattacat tactttgagt gtttaattcc actatgacag gaagtagcct aatacatact   180
tttttggttt aattttctgg attcatcctg attttttagtc ttcctacctg agtacaacaa   240
taaaggaaat cacttcttag atacattaaa attacttcta aacttgcccc ccacacatga   300
actgttttca gtttgctatt ttaatggnc catgcttatt tatatagaca tagcataaca   360
ctgntnacac tttatnggcc actggcctct ttcttaanan tatantataa aaaaattttc   420
tatatt                                           426
    
```

<210> 8610

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8610

```

aaagtccata gatttttaatg aaatttctat tcctgtctct gagcggctgc tgtgctttgt   60
ctgggtcccc caggggacaa gagtcaggct ggaatgagac ctctgtctgc caggcctttg   120
tggaggcctg ggaggagaaa ggccaaaggc tttgatgctt gggaccgatg cccggccact   180
cagctccaga caccagggat ctggcaaggg ggtggggcaa gggccagaca gaccaacagc   240
cttggggctc tggcgagagc tcgccaagac cagatctgaa gctggctggg ccaaagcagc   300
tgangcggca gcggcagaca ggtgccctgt gggcagaagc cagagcctac ttcggtganc   360
aagccnttaa gcttgggctt ggggtgcttg acttgacaa tgggtttgga actggccntt   420
ccttgggctt gactgnaact gccgtcccaa cggtgggtan ccactggnet caagtcaaag   480
taggcttcca naagaggtgc aagcagcanc actggaaaag gtgcaacccc caaagggaac   540
    
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cggggtntna

550

<210> 8611

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8611

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ccaaagaagc cccatittat tacagagaaa atacaaagcc gtttcctcac agggaaaagt 60
acagtttccc ttctccaggg tgacagatga gccttttccg aagttctcag ctttctcttc 120
tatcgaaact tcccatgtcg gttaaagtgt ttgtagagat agcggatgcg tttattaagg 180
ttgtgcaggt catcagcgaa cattctactt ccaaccattt tcctctttcg gatacaacgt 240
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ggcacaccaa gagagaagct tctgcacgcc agangcacc agtnccaagg cgcctacctg 480
ccccggataa gaggtncctg gcatttctct aagtctcccc ctttaaacag gncancaaata 540
aaccaccagaa gatgccngga ccng 564

```

<210> 8612

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8612

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gacaggacaa ggtttatttg gggtcctgga aacactgggg agagggaacna gggggcaagg 60
tcgaggctna caggggcacc ccctagccaa atgccccctt cccctaggga ttgggaggaa 120
gacagagaca gacaaaccaa cagagatgga gagaaagacc aacggatgct acggagagag 180
ggaaggaaac cccagtgtcc accacctncc actcagatga gttcacagga taaagaattg 240

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cgtggaccgg tccacacgct ncaggaaaag agaggagtgt ccgccctatt cactctaagg 300
 aaggtggcag gccacagcct aaaccagccc attccatgtg atgggggtgt ntgcacatag 360
 atcaagtcca ttctactggg caaggggatt tcaggccagt ctattctant gtttgggggc 420
 cggggaaaat cgttaggggc gatccattcc cantcgggga ggggggattn nanggcangg 480
 ggcattttcc ttggnccctt ttt 503

<210> 8613

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8613

ggacagcatt tcattttatt atgtaactgt agaaagcctt gatcaagata aaaataggga 60
 tgacttatca gaaactgaag aattttctta ggaaagcaaa gtttactgaa ggataccttc 120
 attccagcca tgatgagcat ctgtcttctc aggcaatcat gatgaagctc cagggacagt 180
 ataaccatc tctcccactc atccctgagc ctgtgtcctg gactgaatgt ggtagaggt 240
 tgtggaaata aaaaaaagaa ccaaaataag aacactctcc ataaaagcca agctcagaga 300
 ctgtcctct tttgcttagg tacaacagga gcaggaagga tcaacattct tgaaagcata 360
 ccttctatc atttggcttt ttttgacttg gggcgccagt gtagagctga gcactccact 420
 gccctttct cactcacaaa tgtctgcata ggtcacgtcc ggcactttca agcctccttc 480
 acgtcaactc ctggggcttt tcgnggccca tcagtaggnc atataagntg naccttgggt 540
 ttactcctnt 550

<210> 8614

<211> 251

<212> DNA

<213> Homo sapiens

<400> 8614

gaagtatttt tgttttttta tatacagaat acaggaaagt ttctgtaaag tctaaaacat 60
 tacaattact atgtacattg gtactggttg ggggggtggg aggagaggag ggaaccaggg 120
 gcaggaggaa gaggagagaa ctggcaagag aacaaaataa ggagacanaa caggnttacg 180
 acaaaaacat ttngctacn atagacaatt tganaaaacg ctctaccaca tgtagtactg 240
 tacacggntt t 251

<210> 8615

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8615

caatcaacgt gttcacacac agcatttatt ttgtaagatt aatttttaca aaccatccac 60
 aacttggtca aaccttnggc tttatcctat ctaatttcaa acaaatgcc agccttaatt 120
 tattacaatt atgattcgta gactttcact caattacata aattcactct cggttgagga 180
 aaagagagag gtggcagagg attaatccaa aggatcctgg ngtcactac ccttcaaagc 240
 cagaccctgg tggggcaagt cctgccaaagt catcaggtgc tgattaaatg cagggcactg 300
 ggtgggaagc aaattcctaa aatgtggttc tttccagaag catcttataa tctagctcag 360
 gggcttgag gctccaactc actccggaat cacctgggga gcttctgaaa ccattctgat 420
 cctgaactcc ccctaaataa atcaaactct ttgggccata aactgnaana aaaaagttaa 480
 atcttcacag gacattctaa tggggcagcc cnagaggnga tcccctggtc tanggttttc 540
 atnaaatacc ttanaaattg 560

<210> 8616

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8616

agtccagaat ttcccaaatt tatgtgaaca tgggacatca tttttcatag cacacacgtg 60
 aacaagccat tattctttta acaaggtatt acaaactcaa ccactctgga gaactgatga 120
 gcgcctaact gaaattatta gactaaattc ttagtaaaca atgttttctg aaccttggtc 180
 agaaatataa tcaactgcaa ttattttcca agtggtgttc taaaaaaca tataactgga 240
 cactagtaag aaagtaagg aaattattaa tccactcgca ttcaattcta caaggaatga 300
 aaccattttt aaaagtggct tagaacaac aatttactga gcacttacta tgcacccacc 360
 aggtatattc cttttataat gtaatcttca aaatgagctg tcaaactatt ggcccatttt 420
 gtgaatgagg aaaatgaaaa ttaagttata taatcatgag tggcagagct gggaaatgaa 480
 ctcaagtctg ngactntgaa gacctgaaaa aggtncncct ttcanatgaa tggcttaact 540
 atcttatggg attacctgga a 561

<210> 8617

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8617

aggcggcagg atgctggttt atttactgta ggatctccag ggccatcaaa gccccctcgt 60
 gggatagggg gactatttac acagccaggg aggagggcag ccaggaggca gagaccgggt 120
 cccgtatttc cctctgcccg aatgaggagg ggaggggctg cctgggtcct gcagctgtag 180
 tcttgggggt cagatggaaa cttcatactc ccgcgtatcc ccagcttcat acagcggggt 240
 gctgaagtcc gactccacgg tgatggggct gtaggagtgg gagcccgaga agccgaaaag 300
 ggactttccc tgaagcttgg ttagtagat gtaaagcca ctgccagga caatgaccaa 360
 gcctagaggc agcaggatgg ccagggccag gttccccct tccagctgcc gtgatggatc 420
 tgtggtctgg gtcacttcag ttttcgntg tccaggagct cctcatangc aactttgcag 480
 antgggggct ggcttgggcc actgggaagg gtgggccggc acacaggtga tggatgaact 540
 ncccataact naaagcccta tn 562

<210> 8618

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8618

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agggtaagtc agtttattga tgtgttgga tccatcaccc agatatatta aacacaaagt   60
acttaagtaa ttcaggattt cctttccaga aacaaagcag gaataaaaac cactatgaca  120
atataaaacc tttgtacatt tttaggtatt tttcccttca atatttaa ataacatgatt  180
tcttctggca tgtattta atgtaagtga catgatttta attagtcttt ttttatcggt  240
atttcagcca ttataaaagc cataaatgtg tttccagaaa aagtgccttt gatattatta  300
cagtattctc tcataaaata ggaggtacgc ttgtgagttt agtactttag ttgtaggcac  360
agcttgacac tgtgtgtcgc tgatgtgaaa cactgcccct ttgattcca tttcaaaatc  420
ttgtggaata tcaccgtgaa gaacangatt agagagatga ctatttgcgg gtcttgcctt  480
ggcataagca gtgtaatgcc ccgacctata gtcnctgng gtcaacaacc tcncttagg  540
gatnagtcctt                                     550
```

<210> 8619

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8619

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aagtttttct tttttgagag gctcatgaaa ttcaaaagg accactagct aatttcaacc   60
atgcttcaca aaacaataat ggctatttta tattgcagtt accaatgtaa tgcaattagt  120
gctttaaaat aatctacact caaaaaaaga gagagaaaga gagagacctt tggaggaaat  180
atgcttattc aaaagcttct tggaaaagaa aatttacctg aatatcaagt catgactgat  240
ctcaagtgta atgtttaaaa gcttcacaga catgaatatt acaatcttca ggtctcagga  300
cttttaatct gagaaagttt agagtttggt ttgtttttta aattcacttt ctaacaaaaa  360
caaataatag aagtactcaa attttacta tttacaactc tcagcctaca atctgaaatg  420
```


acacaataca agttctctta aactgcagca ttaaagggtg ggcacaccat tcttctgctg 480
ctcgattgnc atccactgga acncacnttg aaaatatitaa tggtagtaaa atgatacctc 540
ctgtnccttc aatngccaaa 560

<210> 8620

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8620

aagttgtaaa atatitititaa ttgtaaaaac aaagtcaata aaggttgaca atgtaaatgt 60
tatctcacia catttccctt tggttcctga atttgctaga ttcctatgta ccagcaaatc 120
tccattagca tttctcaggt ttcatgatcc ttttcagata tgttggttga ttttatgtat 180
atattgctta gaaacaaaaa tccacctgat attaaaacia accaaaaaaa atcataaaag 240
caagcaaatg aacaaaaaac cctagtittt ttgtgctttt ctttcacatt tcttacaggg 300
agatttgtat atctcagata ctttcaaaat ctaataggta agtaaaatta gtgccttaac 360
caaacagtaa ggataccaaa gaatcctcca tcacaagtta ctgaatcaaa cttctcatga 420
catttgcn gn atattcagat ttgaagattt ttaaatttag aatttaaacc aacttttagac 480
tgctgatttn catattcaag actggaagtt gntgcagcat ataaangg 528

<210> 8621

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8621

atactaaaag tctgtattitaa cctaatttag cagtttgaaa tgaatattgt aggttaagttt 60
tacatgatca tatctgtaaa atggaacaag ggatattaaa tcataaaata agactttcca 120
acatttggtc tggatactga attagtatga cacataatat tctaaaactt tgctttctct 180

atgctggcctt ttctcaacta aatgaaagca agatatgatt tttggatgct taaatagtag 240
 ctaggtattc tcttattcca gaacacagaa aaaaaagcc attaatgtg ccaccataaa 300
 taaaattttg ttactatitt aagtctaaaa ataacagtaa tataatcatg attcatttta 360
 catgtttctg aatttatatt atcaaccag agaaagggtt atatcagaca ggtaggaaac 420
 ctctgacaac gacagaagaa gtgaactgcc aaaacatgc tgaagnggtc tttaccctcc 480
 gcttggcact ggancangga ngtgccgcac acctggcttg gtcacctgnt tggt 534

<210> 8622

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8622

actgacagga aaacatttta attcaaact ntaccactac ccagcctgaa gcaaagtta 60
 aaaaaagaaa gaaagaaaga aagacncaa aatacaagcn caactcacat tttcaaataa 120
 aggaaactnt tgctaaataa gtagcaatta tgctgaanaa tttatatgct aaagcacgaa 180
 tgaatntaaa aacaccagag cagtcaacca tagcttttagc actttgagta tgattaacag 240
 aatgaacttc caaaggncaa tttaatgtng acacacttta aagagatatt nntaagcctg 300
 gtcaatgtat aacagcacct nntaattcag gggtatncgg nntaatttag gcataacatg 360
 catgggataa atgtacatat atntncngaa ttaccacatg tcttcnacca gattactaca 420
 gaaacttcat gtatcaccta cccctaagag gttttggcta tgtagtnttc caggttntga 480
 aatggattaa aggaaacctt aatttttttn ctttgggnacn 520

<210> 8623

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8623

aaaaatctct agttttatttc taacaaacac cacttgatgc ttgactcaca ggctttattt 60
 acatttgtct acagtatcat ttccttatga aatgaactag tacagcttag ttaaaccaaa 120
 tgaaatcata atcatcagaa ttgtctgtaa actactatta gctaaattat aaccttgcac 180
 ttgcttagta cagccaaagt tttaaataca gaaagcaca gaataaacca atggtaacat 240
 gtagaatcta gatcgtcggg gcaatttaga aggtagactt tcaaaaagtc tgaggcaca 300
 ttacaagtga gtaaaagttc ttgtgcaacc tacataaacg cagcanagaa acttatgaca 360
 taaaacatgg gaaagctcct gtaaaaaata tttatcanaa tattttctac ataaggatat 420
 tttngctttc attttttagaa tcagcctnga ngagaaaaaa cattcctttt aaagtnaaaa 480
 catatatttt tggtttgggt ttgcctatga aatatcttaa aaatgnnggn aatttttatt 540
 t 541

<210> 8624

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8624

ccatattttt aaaatacttt attttttaca taatactgtc attacaaaaa aatacaaaaa 60
 aactactata aaaacattcg ggggttgtca aagtgaagaa acctaaagac cccaccccag 120
 gatctggctg aagcagtcct cccccagctt cttcactatg acctttatac aactatgggg 180
 gtgggggtggg atcacacagg cataaaaggg ctggaaattc cccacacagc ctccaagggt 240
 aagaaatgag tagcttcaca taccacaaaa gtgggatttg gaagtttggg ggtggctagg 300
 ccctgagttc agaggtgtgg ggaaaaacct gtgaccctga atctcttggt ggggaatagc 360
 tgccacctga ccccaaagcc ctttccttc ctgatgaagc tggtagatgg gccctgtccc 420
 cacccttttag ccttaatcct naggcccatt tcctggcctt cacccttgga acacttctgg 480
 aaaaccagca gggaggacag aancctcagn ttttganggn ggaggg 526

<210> 8625

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8625

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cttaacactg cttttattaa caagtcagct tcatatatga aaggctcatg cttctaagtt 60
gcaaattgta ctgctactaa gagtcacgt gaatgaaaac acagcaatat ttcaatatac 120
cagaatttcc caaagggtgt tctttagaac acaagttcct tgcagtgta ctaggtgcca 180
ctcaaaaaag tttctgtggt caaattaatc tggaaaacac tgggctaact gacagtagat 240
atttggtgtg tttttctctc ctcacaggac atttaaatta gagcctttga tgtgctcatg 300
ttcactaact ttctaagatg gnatgtgttt tccaaactta tttcatccta gaatcctata 360
tttagaagag catctttgga acttngttc ttggaacac actttgggaa acactggatt 420
ctattatttc tacagctaac tagcccaaaa ggctagctat caatggctta atncagangg 480
catttaaccn ggcttngntc taccagcntn g 511

```

<210> 8626

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8626

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aatttcttca aagcaacttg aacttttaat aaataatcat aataagttac agcaaccatt 60
tattctctgc tatatgctag atattttact tgacttattt ttaatcttta ctgtaacaca 120
tctaggcaaa atattaatat acctatttta caaaaaagga aacacactca gcaattttta 180
gggaccagg agccagaatt ccatttcttc caatttcctt caatngttc acgatgtatc 240
aagtaactcg ttcatttagt caagcaacca ttttagctga tttagtcact gattcaacta 300
ataacattta ctcattnct tagatttggg aggcatagct tgatagctgc aaggattatg 360
ttaaatgtca gtgaaataat ggaatgtgga ttggctcatt tcatcttaaa gatcctgctc 420
acagggcacc aaacattaaa ctaggtttta aaattaaaat ggtngacatt ttctngngcc 480
agaaacttng ggtcaatttg ggaangtttg gtggggnaat ccaaaacatg 530

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<210> 8627

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8627

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gagagggagt ctcgctctgt cgccaggctg gagtgcagtg gcgtgatctc ggctcactgc   60
aacctccacc tcctgggttc aagtgattct cctgcctcag cctccctagt agttgggact  120
acaggcatgc gccaccacgc ccagctaatt tttgtatfff taatagagac agggtttcac  180
catgttggcc aggatggctc cgatctcttg acctgtgat ccaccgcct ccacctccca  240
aagtgctggg attacaggtg tgagccaccg ngcccggcta atfffftgta tfffftgat  300
ttttaagttg agatgggggt tcaccatgta gaccaggttg gttttgaact cctgacctca  360
aatgatctac ctgtctcagc ctncagant gctgggatta cacacatgag ccactgcgcc  420
ggcatatgta acattttaaa tacctgactt ncttaacata aagnagaca gcntaaggnn  480
gctggcnctt gggaaagggn ttctctttc ttttt                                     515

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<210> 8628

<211> 470

<212> DNA

<213> Homo sapiens

<400> 8628

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caactattta aaaacgtaaa aactattctt aggttgaaga ccaccagaa gcagggtggtg   60
tgctagattt ggcccatagt ccaaccgtac tttctgtgat gatggaaatg ttcaatattt  120
cctcaattgt ctaatatggt aaccactagc cacatgtggc tactgatcat ttgaaagggtg  180
gttacatgga ctgagaaact gttttttttt tttttttgag atggagtctc gctctgtcnc  240
cccagctgga gtgcagnggc nccatctcgg ctactgcaa gctccgcctc ccgggttcac  300
gccgttctcc tgcctcagcc tcccaagtag ctgggactac aggcgcctgg ctaatttttt  360

```

ctatTTTTtag tggagacggg gcctcaccgt attanccagg atggctngat ctccttgacc 420
ttcngatct gccncttgg ccttccaaag ngctgggant cccggggnta 470

<210> 8629

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8629

accagaacat cacataagtt tatttcagat gtaacagcaa tgtaaaatt gacaagttta 60
attcttaact gcaccaagta aacttagcca ttttaagtatt tttttaagtt attccctcca 120
aaaaactgag ggagcttttc tttccacca ccacaccatg gtttcccaat agttctcttt 180
ttggaggact tttcaattga tgagtaaact gctttagata ttcagaact tcattcccca 240
aatgaaagct aatctggaca aactatatat tgcatagatt tctctacaga ttctttgctt 300
taaaacctaa atgcaactaa catagtgtaa ttttaaccta ttgccccac agtaaaaact 360
atctgtcctg aaaaatatga tggatatatc ctgngathtt ccagttaaca gaattggtct 420
acttcaaaga taattattat catatatcaa aataccagct taacatangg acattcttca 480
gtcnttactg actcatagge atatgaacct tggngcccag ctttttaacc tnttccacaa 540
tcttctcct cctc 554

<210> 8630

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8630

gaaagtaaaa tttcagtttag tttatttagt ctttacactt aaaaactgaa gctacagaca 60
cacacataca cgcacacata cacatataca tatacgatac acacaaacaa aatagagcag 120
ttccatgaaa tcagacatat acgggaatgt cttgattacc caacaaatcc tctccccttc 180

cttccctcat caaattgcta tgattgaagg cccaggaagc taccaactac ttagggcttt 240
tagagtcata cacatgttgc atcctgttaa cttgggtgtg gtgctgttgc tcacagtaag 300
aaaaatggca atatccccag agacagcaaa gtatittgca tgtttatgtc tgtgagttaa 360
ctgtcaccac atattgcctg ctgtcttcat caatgcagct catagtaccc aaaaatgtga 420
aaaaatccta tccaaaacag atgnngcttt ttacatacaa attgggtaga acgcanagcc 480
tgatgatgaa agggtcattt tttactggna ggnntaaaaa atttaaattt tgaaaatcag 540
gttnggn 547

<210> 8631

<211> 415

<212> DNA

<213> Homo sapiens

<400> 8631

caagttgctc acatttttagt tggaaagtca gatcatgcca aagaattctc taaaacattt 60
gtaagtttag agcaagctac caatgggaga aaggctcagt gaagtctact ttttattatg 120
ttttccttat atgggtgtcag ctaataagta tttggggaat aaatgtgtag atagtgggtct 180
gtttaaaaga agttacatta tttggcattt attacatttt atttttctta attgattaat 240
tgcagttaaa ttaccttagc atgcaagagc agattttaca gattttgacg tatgattaag 300
cagcataaag cataactaat gnggttttag tggcatgcta tgtattaagg cntgaaattt 360
aaatcccccc ttcatacaaga ttttttgcag ttccggggaa ttinnaangat cnnat 415

<210> 8632

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8632

ccagttctga caccttttta atagaaatca ctgttttttag gaaacaaata gcacttttgt 60

aatttttttt tacaatgttt cttaccttga tcttaattta agtaacncta ggaagacctc 120
aatatctttt attttccttt ttaattttaa aaaaagtttt ttttccccag atncaaagat 180
ttttgccctt gcataaaaaa acagtgcccg aacgatgacn caaggactca caaagactca 240
cgggacctca ctgacnctat gattcctact ctacatgca aggtcttggc tacccttaat 300
tggaactgtca gcctgaaaaa cagcttttct attccttatt ttagtttttg ttaccaagaa 360
agtaaaatga acagtaaaat aaaactttcc ttaaagaaaa aangaacaaa nccnaaaatt 420
aangaaagag aaaagaaacg tctncattca attcacacac cctngggccc ggtgctggtt 480
tactcaaaaa cttcccttct tataaattna gaaa 514

<210> 8633

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8633

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catgttctct gcacctccaa attttcttgg ctattaccag tagttcctta tacgcaaaca 120
tatgagaaat ctctgaagag caaattcagt ttcgaaaaac agctaataat atcgaagaaa 180
agtaggcact ggtggatact ttctagaaga cagtattaat acagcaatac tttaggaata 240
atgatgaatc tgttttaaagg caaaacatca ctaacctaata cagatcactt agagaaataa 300
gtgattttct ctgtcttata ctgagatcat atagccattt aacctatctt caaacagaca 360
naaattttta aacactttct atcctttaag aaaatcttct ttgcttggct aaatgacaat 420
gttcangaaa tgcctgccac agaagcctan aaaatccttg gcaaccattt cagaagaaan 480
ttaccctgc ataaatgggt ttccagcaac cgcttcaata agctttt 527

<210> 8634

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8634

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atcaaacaca aatttatatc aagattaact ttttcaacca gcttacaagc agacttttcc 60
ctttctttgt taaaaaatga atggtatgaa actatatggt aaagatgttt ctataatacc 120
ttacatttac atagcgcttt acaattttca aagtgtttc acatgccatc tcatttaatc 180
ctcacaacag ccctgtgagg taggtacagc aggtattatt atcctcattt caagatgagg 240
aaattgaggc aaagagaggt taagtgactt gcccaagatc acacagctgt aagtgttaga 300
gctaggacct gaaatcaagt ttttgactc cttgtccagt actcattcca ctgtaattac 360
tgcctcaagt tatgaataat gaactgtgta tcaaaattga aagcttactg aagttcattt 420
cagtgatgtc ttaacagtaa agttaaatga gaaatncaga acagtaggct gatggtttac 480
ttgacataaa atggtgcaaa ncactttggc taatacttg 519
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<210> 8635

<211> 510

<212> DNA

<213> Homo sapiens

<400> 8635

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gaaaccaatg cattctttat tgcagactga agcttagggg ctcacccact gtgagctctg 60
atttgggggc atctgtggct gccacactt tccaagacag acaagggcaa actctccaag 120
cagaggagaa aacaacttcc agaagctgcc cttcaaagg cctgaggtga ggacctgggg 180
cagcaggcag cttggcatgc aggggttaac cagaaaggcc gggctctggag ggctgggcac 240
acctaacct catctcttgg tgactgcagg tccactccc ttcttcagga gtgccatgca 300
gactctggaa caatctaaca ggccaagtgt ctcccagggt gggttaggga ggaggctnaa 360
cacaggctca gatccctgga agtggcaggg agagaactga gagaaacttc accctctgct 420
cggaggacat tccaagcct aggtccttgc ttcttaaact ctaaagtgt tataggaatc 480
aacttggggg tctttgctaa aatgcagggt 510
```

<210> 8636

<211> 424

<212> DNA

<213> Homo sapiens

<400> 8636

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gaagttagag atgacaattt tgagatttat tctttatcag gagatgcaaa ctcaaatacc   60
tccagaatga aggcaggtaa tgcaaatgag gattaagtat aattaaaaaa aacagcattc  120
atccttaata aatggcatgt accactttgt ctcagcaggg atgcagtagg taaaggtgga  180
gactgtggtg agctagagga cgtaccccct gtcttagggg ccagtcattg ccaaatagaa  240
gtgtgggatc agtgtaaca gatcttctgg ttttagaga gaaactatag atattttcat  300
tttgacactt tctaattatt aaatgttcac aatgaatttt ttaagtgctt aaacactata  360
cagacaaaac catttgnatc tatggncaac ttngccttgg gggnttctaa ttngngactt  420
ntaa                                         424

```

<210> 8637

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8637

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ccaaatgggc atttattatt tgcacagatn cataaaaatg attcccatTT taaaaacCAT   60
aataaaaata tacattaacc acagaagtac ttactctaac tggaaagaaa atgaacatgg  120
ctattttcaa aacagtaata aacacaaaag gtcaacatac ataaatcatg acaagtgtac  180
atctcatttt tgacaaaaat aagttccatt ttacattaa tgcttcatca tcaggctcca  240
tattacatcc tctgacctta ttacattta ctatcaaatt tctattagca tgtgtcactc  300
aaaggcactc aattcagagg gtaaaaagtc ctgagcttaa gtaggaaaca aagttcccaa  360
ctaaaatttg aacataaata attctaaaga tcagagaata ttaaaatgtt taaaactata  420
atatctggtc cataaataat tcaaaaccta ataataaagg tgtcangact ggtcaaagaa  480
aagancctgt taggcagaaa aattcctngg aatnaacc                                         518

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<210> 8638

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8638

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aaataggaag attttaataa cagtcagtcc ctatagtccc cttgtctaga acaattaaat   60
tattatccct cagacagtac aagacttgct agtagactgt ggggaagttg atgagttgac  120
accagggcta gtggcatttg ttttggggaa gacagtgggc ttgggccgtg tggctggtgg  180
tttgaccggg gcagccatct tgacagactt gacaggccgg aaggcgcagg cgatgtcccc  240
agcagtactg gcgctgcgct ggaaggcggg ctcggggtcc ttgaggagct ggggtgtgcag  300
agggctggag ggctctgacg tggggggccac cactggggag gttttgaggg gctccaaggt  360
gtccagaacc acgtcagggg tgtgtttgac actgctctgc cgttctaagt tcccgtagct  420
cattcanggc cgagttcatt gntgcctcaa taccctgagc aatgacctca nggtccatgg  480
gnccatgggt antggaactt tttgacctn ccgttgggga anct                      524

```

<210> 8639

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8639

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acagatcaca ggaattttta attgcagatc agtcatgcta cttgggggtga tcagaaagac   60
ttgaacactt accaagtga taattttatt aaggctctga aggtgagtgt ccggaggtgc  120
tgggtaaaac acatcacagg taagaaatgg gaaacctacc tcagcatttc tgaaaggcac  180
aatctatgga agggaaacct agcgtataaa aaccctcact ggatgtacat ggaaaggagt  240
atgggtgagct atttcctttt taaaggatga gaccttcata aattggcccc tcggattctg  300
gtgattcccg ccgcaagcgc aaatgctcca gtgtgttatg aaaatggttt ggtaatctgc  360

```

tctggttctt cactgggatt caaagattcn ggaggtcttc tcgaatcttt tggataagct 420
 ggtttaaaaa cctgaattgg tacccgcac c atttccctt cataaaaaata gatatatctg 480
 gtcagaattt ctataaaaag ctgcacttgt agaaganggg gtcc 524

<210> 8640

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8640

aacgttttca aataatttat taggaattta aaactgaaaa taaaacctgg aaaaagaagt 60
 tacagatgtg gagagaagag acaccggagg atggtaactt gctggcttcg aaacaccatg 120
 taacatctta aaaaaaaaaa aaatcccaaa gcaaatcaga aaacggaatt ccagggtcct 180
 gagcccatgg ttgggcccag tgggggtggaa gggtccgggt ntgagggaga gggaagctaa 240
 gtgtctcagg actcagctca aacgtgtaga aaattaaaaa tnaaaaccaa taaaatgcag 300
 cttctctttt attaggaaac atttaaaaaa aaaaaaccca aaacacgaac agccngcat 360
 ntcagtaacc aagattattg cttttgggtt ctganggctg atagggtaaa caccttacac 420
 aggccattna ctnttcaagg gtggggtttt ccggtngggg ccatgcttgg gnaaaaagct 480
 caggcctggg ncctaaaact gggggaaagg gcccccnaa ggggg 525

<210> 8641

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8641

ggttttgaaa acacacacct tagtgtactg aaagaaaaac aatttctttt aatttggttt 60
 gttggtccca caccatct atcaatgtat gtgctattta caaataagtt ctatacagta 120
 tttttgcagt acctttgata attcctagac ctctattttc attctgtgta ttaatgtgaa 180

taacagatgg atattttaat atttaggcag atggtaaact ttcctatagg tcttggtgaga 240
 cttcgtctta taggctgaac accattcaca aaatgtaata atgcttcatt ccttcagggtt 300
 gaggtaaaga acttgagcaa ctggattagc aaagctgcaa agaatagaat gtggcctaag 360
 atgtaattat gttctctgcc cttcctttgg gccagggtag ttttgcaatt gacacaatgg 420
 aaaataggcc attaagcctg gaaattaaat ggtcttaacc ccaatcttac aggacnttaa 480
 taggctttca cttggcntnt ttaagggnnt tcaacaaaac ctaa 524

<210> 8642

<211> 478

<212> DNA

<213> Homo sapiens

<400> 8642

ggaaacatcc tagtaaaaat ttattcagac aagaatcgtc aaaggatgct aaacctagga 60
 ggggtagatt tgatgaggaa cagaattgtc aacaaggctt caaagtttct cctcacaaat 120
 taccactaa ttgcaaaagg aaaaacaata acgatacact ggagaaactg gacatcttac 180
 ccaagtgatc aaaattagca tcaccaataa gggacaaatg gacattctgt gcatctggat 240
 gtatacctgc aatacatatc acttacagca tttcaaccct cactgcacta ccccaatcta 300
 accatgagga aacatcagaa aaacccaaat agaaggatac tctatccttt agctgncctg 360
 natTTTTCAA atatattact attataaaaa acnaagaaaa gctgaggaac tgnttcagaa 420
 tanaagggtta ttgncattcc acntttggac cctagnttgg accgnggact tgaaaaaa 478

<210> 8643

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8643

ccccgntttt catctgcaaa atgaggaact aaaatctggg aaaactacag agtcgcttgg 60

agggtaagcc anagggtcct tgcccttggt acacccccctg aaaacaaaac ctgacaaaac 120
tcaatngnga ttaattagng canaaacaaa gacagattca gcaagngcaa agngactac 180
aattttccct tgccttggg aagccagctc cctggtcgcc agtggcaggg tggcagggc 240
tgcttgccctg acctgccagn tttgggcgcc acaggccact gggcaaggcc agntcctnta 300
gctggaatct cggttcttct ggttcgcga cagggggctg tggcggcga ggccctccat 360
gctgtgccgc cagtgcagc agcttcggca aaaagtnttt gaaagcaaac ctgatctnga 420
cagaanaaag gccnggcttg anaactggnn atttgaccc 459

<210> 8644

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8644

gtcatttagt tattctttta tcattattac tttaaaatac actaatacat tcttatctac 60
ttccctccac cgacaaatat ttgctaaat taaaaggatc actggaagta ttatgacccc 120
cctcgtcaca ggtggcaga accaccacag ttttgtgaat gaatcagaga aggcaacatt 180
tcatcaacga aaactcattt aggtttcaaa aggcaggatg tagtacagaa tgcattattc 240
tgactgtctt ctggaataga aaaattggaa aggatgaaag aaggaagta gctccagctc 300
cactgttacc ttggcaaccg tggcccaatc acaggggcag aaattaattt tgtgcccgtg 360
acataacgtg gcagaggagt ggggagccgt ggagtgggga gagaatgacg gctgggttta 420
aatgctcaga angctagtgg ggaagggtcc aggtcaaccc gctgggtggt naatctaccg 480
tnccaattan cactgggcc ttttctactg gaaggttnnga ttatggagag acnn 534

<210> 8645

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8645

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aaatacattc aagtcagtgt taatatttatt actgaaaact gagtaaatta taaagtgctt   60
tttctcaaga aaactacaaa cagttttaga aatatatata ggatatttca gggttagaag  120
tcaaatttgt gigttagggg acaagcttaa gaactctgga tgttgctgct ctaacaatgc  180
atttgatgat gtgccatgtg atactaagaa gtcagtagaa tcccaccagt cctactgcct  240
cagatgagtc ttgtttcagt catgggttta caaagtcatt gagtgcttga ggacttggtt  300
tcctggaagt gattccctac ttgggtatgg caagaacaca tcagtagtgt aaaactgtca  360
tctgtagtag cactccatga tcatttcctg gatgaccact ttaaattata actcacagat  420
atgtggggat tctaagaatg gtatatgtgg ngaatagaac ctggatccaa acataccagt  480
tctgactcaa cacaatctct agttctccat tttanggatt aatcatatct a           531

```

<210> 8646

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8646

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attgctcttg atgctctact caatgtactg tccatatctt ttgtatttac ttcaaaggat   60
tctggatcag cagtataaat aagattctca gcactctgct tacaatggg gtttagctaca  120
tgtcgacaca gcactcttag ccagttttct tttggaagtt catctgatgt catctggaaa  180
ctgagtagca catttgccctg ctctgttggt ggcctcaca gcaaggcaaa agcattatgg  240
caatcttctg tctctcttat gtccaatacc ttcttaatct gagaaagagg cattaggtga  300
atatgcttaa gagaagctgg gggtcgggtt tggccatgag gactcctaaa agtgccaata  360
accttggtcc gntttcttgc tatctctagg caatcattga agaggaagag aggtacttgg  420
tctcctctgn cacaagggtg ctcacctaga gnaaatgggt caaccntgg ctttaacttcg  480
ggagnaaatt aaagaattac ttgggcttcc ntttaactta taan                    524

```

<210> 8647

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8647

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gccaatataa gaatcttatt tactgcttta gtcaagaagg agatgttatt tcacttgtga 60
cttcctccca agtgaatgag tatacaattt aacaaactaa cacagttcag tttattaagt 120
tacaatctgt aaccacctaa tgtagctcag tgtatggtgg atactagata taaacaagag 180
tagggaagtc tttggcacct gcatgatgcg tgccggcttt taaattcaga aagatgagaa 240
gctacaatgc aacttttttt ttaatctaca gataccgcca aaagaagaaa tgtttatcag 300
atthtgaatg catactggaa agttggccgg tggcagcttt tcacattaaa tttcatcaca 360
agtgaactt gattacagcc caaactagac aaggcaattc aagtgccng accctgaagt 420
ncacgtgaga ctacaggaga acctgcatta tgggtgcttg ccagccagtc tctttgaggn 480
actgcctgta acagtcaccg gttgtngggg agaaacaact tccntttttt tn 532

```

<210> 8648

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8648

```

gataaaggcg gcacttggca tctagtactc aaacaacttt atttcactag ccatgagcaa 60
aaagttgacc ggctccaggg gattttccat cctgccctct ccctgctggt ggctcccatg 120
atttggaat aacctcatgt tccacttggc agtgcctggc tttgtgcacc cacatggttt 180
tggcctgggt cccagtgaat atggtcctca cctggctggg gaacatggtt ctgagaggcc 240
ccttgatctg ccctggggac atgtgtggcc atgctaaggg ccctgcccac cttcacgtga 300
ctggccacct ctgccagggt gcaggcagct cctagcatgg agacatcctt catggaagtg 360
agctttccca cccacctnca taccacatt tctcagaaac agagttaaca gggaaccaag 420
agtcaagaag ccacagggt ggtaacgtgc ctacaggcca aantngacc cttacctgaa 480
nagccnggcc accaaaggta tcaggaangg aaaaaatttg gcctggaatg agataggaca 540

```


agaaaaa

547

<210> 8649

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8649

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anaaagtagg tgccccaagc ttataggtgg ctgttaacat tgnnttattt cctttataca 60
aaaagtagaa atgacagaaa aaacactntt gacagaaaca ataccactga cctgatctca 120
tgaaggagct gagccaaatc tgccacatt atggggaaag ggaggttcaa tcaacattag 180
caaatactca tgcaattgat gaaatataaa atggtatcag tggcttggtg aatgtcctgt 240
gggtaggggtg aatcaatcta ctcttaaaaa acatacatit tccaatcat gcttttaaac 300
ggcatntttt aaaaaaacia gttatatata cagatatcac cccaaaatga atcttttaca 360
gtctactact ataaatttaa ggcatcctga tattctgntc ttctgctggt gaggcattgg 420
tttcatgggt ctcttttcca aaaggattgc cnaaaanttc cataattttc caanggcttc 480
nngggaagaa aattttaaan gggncctcca agaaaaagtt 520
    
```

<210> 8650

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8650

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caacttaaaa agttatttat taaacaagtt aaacacanc taaaagtatat ttagagggtcc 60
aagattcaag tatttttgtc aaactttcta atggtaaggg gaatgataaa aattgaacag 120
atataaaaaa tattcttaaa caaatattaa agcacatgga aaattcagaa ataaaaacac 180
accaccatat aaagaaatca aaatatttca tatgttttta aatgcttatg gtatgagagc 240
caaattgtct atttccaggt taataaacia tatataagct caccttttta aaggtatcat 300
    
```

actttgtgtc atatagaaat aattttggaa acagtatgtg ttgggtgtgt aaattgtcca 360
 cattaagcaa aacatatattt acatatgaat attttcattt atacttactg gaaaacaaaa 420
 cagaaaaact tataatttaa acatcttgat ttgaaaatat tttggatttg ataagtctgg 480
 ttaatttcca caatgnancn gccaaagggg tnttcaaaga atggttattc aaaatttttt 540
 aaaaana 547

<210> 8651

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8651

gttatggcaa agtaagcttt atttaattgg tagcaggaga gtcacaactt caaactccag 60
 aaaagatgaa gtaaatttgc aatgatttca tacaccaaga ttctcctac ccaaagctga 120
 agatatattt tcaaggaaag gtgatggaaa gaaaaatggg gctcgcccaa gagattcttc 180
 catccagcag gcatatactt tgtctatcat gagtcaagcc ctgatccaaa ggcttggttaa 240
 ctcataatta cactaagcat ctctcctatg ccaagtaatg tggcaagtat tgtgagggaa 300
 atacaaatgc cctaattgtaa aaagtgcatt ccagtgtagg ctgaccttct caaaatgggg 360
 tctggtcaga ttctccatgc taggctacag gaaagaaggc tgaagaagca aatttacaaa 420
 tcagtttgcc taccattgng aattngagcc aatgacttgg cattncccga agtccttana 480
 ccntntnaat cg 492

<210> 8652

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8652

ccaatgtact ataaataaac ctttacttaa gatcttgaaa tcaaaattag tttgtatagt 60

attcagaatc aaacctaattg acaaagcaag atgaaataac caacagcatc atcattatca 120
 gaatagtaac taacattttat ataaaagatt actatgtgtc agaaactaag ggctttcatt 180
 tcattcaatt ctcataacaa cctataaagt aggtactatc attatatcca ttttacagat 240
 gagtgaatga aggctagaat ttgggtcacc ggcccaacat gacccaacta ttagtagtag 300
 gtagagaagc ggggtctccga acctaggtaa tctggctttg gaatctgngc tcataaccac 360
 tngctataa tgtctctgat agcagctact aattaaaaaa taaaaaatgn atgnnttcct 420
 aactttaatc ccncngata gggatattct tgggtcattt atggctnaaa ttttnaaaaa 480
 ccttttcctt ttaaccttta cctatccnca atttgggtca ctggttttat ggg 533

<210> 8653

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8653

gacatctgta actttaattt aatacaaatt gatcataact cataaaatgg gcaacatttt 60
 aaataaaaat actgctgggg tggcccagat tctggtagtt gaagggttgg ggtagggctg 120
 acaattcctt ttgcccagg gagggccggg tggcgggggc agccatttta agaacccccct 180
 gtgttttagct ctccggcta ctttgggatg gtgtgttgtg tcagagaccc caagtgcaga 240
 atctaggccc caggactaga aagaaaagtc aaggccgggg agacatttag gctcagtctt 300
 gcagcccact cctccagttc ccacctctgg gcagggatag agccaagggg caggacaacc 360
 ctagatgtgg actccaccct ctcccagatt cttcacgatt ggatgctgtg gcagaaaaac 420
 gcangtgggg cttgnnttac ccaccctaac ttccttctan ggagatgaca ttttccaaac 480
 ttccttgcan ccaaggttct ggaactgact taagttcccc caaccgaatc tnttgaaaa 540
 attanaattn gggaccg 557

<210> 8654

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8654

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cattctgatg gctcaatgtt tctgggatat aaactcatca ggcatgggaa ggatttccaa 60
at tt tggcaa tacactcaag ttatggtata aaaataacat ttgttttct ctcttttttc 120
tcattttaga cctaagagtt ttttggtata agacacccca gttaagaaat attgaaacat 180
aagagacttg accatcaagg gagaaaagaa gccaaagagtg aaaaatgcta tgaaagtaac 240
tccagacctg ggcggggcgg gaggtaggag gaataaggag aaaaggaggc ataagtggaa 300
aggccagggg cctgtcatct cagcagctcc gagacttgct atgtttgaaa gtgcaaattgt 360
caatggattt taaccatctt gaggttgtga tcttttaaaa agctcaatga atgaggaagt 420
caattccttc aaatgcaaaa tagctggctt tctggctgga nggttgntgg gtctggggna 480
tttctttccc atctaccttc tttccaccc caaccattt cccaagaaa ggtccaaang 540
gtgccanttt tgnncatt 558
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<210> 8655

<211> 289

<212> DNA

<213> Homo sapiens

<400> 8655

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atttattatc ttctttatta atactcacat gtaacctttg ctttttacac anaagtctgc 60
tttagaagaa tgcctcctcg gcttatcatg cccaatgggg ctttttgttt ctggaccact 120
tcccctttct ccacccccac ccccatctcc aaattactct taacatgttc acagatacca 180
cgaatatttt gtaaacanga ttgggttac tggaacttga tttcattaac atcccacttc 240
aaaatggaag gcaggnggng gacagggtna gaaatacnan anagaggac 289
```

<210> 8656

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8656

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cgatagtga aatatacttt atttttaaat acaatagctg ccagcaatat actggtgctg 60
atgttccaaa gataaaagaa aatacatgca ttctataata agctttcatt tgcctgttca 120
agaaattata aagaaaatac taagctaatt aatgataggc tcaaaaaatg cagtatactt 180
ataaaaagcc gctttcataa agccagtgtt tactaaatgt tagcatatca aagtgggaga 240
aacactgcca ttttaaagca ataaacttaa aatttcaaga aacagcctat gagaaatagc 300
acttcctata caaattaggt ataaaaaaat taccaaaaat gtattatagt cacaatcaca 360
gtctttggag tagtacgtag aaagtctggt tttgcttttg tcttttaaaa aagagtaaata 420
acatagcaaa gttttatitt cagcaagttc atcctcctgt tagaacacaa ataattcctg 480
gtttagggtt tcaattaaaa aaaaccccga aaaacaaacn aaaacctgca nagtgctatt 540
cctcaacatg gctggtggga a 561
```

<210> 8657

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8657

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aactatttaa ttcactcctt tattctggga tgtntattac agataacaca actcacaaat 60
ataccatcag acattgaaaa ctaaggccat tctgngagtt atttttaaaa ctignggttt 120
tgencataat gatcttaaaa aaaaatgaat taccaaaacc aagattntnt tntaaaatga 180
aaatttaatg caggtacagg ataactttag ggctatatct aatctgaagc ttatcaggta 240
gcaaaacat tttcgttttc tacagcataa ataacagctn taaggcaacc actacctnag 300
catgaagctc atttctccac gtttagagtag tgnttacctg ctacagtac cagngtttan 360
agaccatttc cttttcagta gcaaaagaga ctttacctaa gaaacacact acatactaca 420
gaatccttgg aacaagaaac agaaaggag ctgnaactaa ggccctgaaa gccattattt 480
gnataaagaa atgtaacnat ttnacaccaa caggttcctc cggnggagnt ttnt 534
```

<210> 8658

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8658

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gtagtagct tttacttatt atttatgtac ttatTTTTtg agacagtctc actctgtcac   60
ccaggctgga gtgcagtggg gcaaccttga ctactacaa ctcctcctc ctgggttcaa  120
gtgattctcc tgcctcagcc tcatgagtag ctgggattac aggcgtgcac cacctcgctc  180
ggctaattgt tttgtttctt ttttgagatg gagtctcggt ctatctccca ggctggagtg  240
cagtggcacg atctcagctc accacaatct ccacctccca ggtttaagca attctcctgc  300
ctcagcctcc caagtagctg ggattacagg catgcaccac cacacctggc taatTTTTgt  360
atttttagta gaggcgaggt ttactatgt tcgccaggat ggtcttgaac tcctgacctc  420
aggtgttctg cccaccttgg cctnccaaag tgttggggaa ttacaggggt gaaccaccgt  480
gcccgggctt tttggaattt ttagtanaaa anggggttna ccatgttggc caagctgggc  540
ttgaacc                                           547
    
```

<210> 8659

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8659

```

aatataagat ttcataTTta ttttgggtcaa aattcataaa catatgagca ttttctgtat   60
aacgtgcttc cttgtattgt ttgatattac aacatagtct tcaaataagg tccatagggc  120
agaaacatca aaggactcta accacgagtg acacactgtc ttaagtggct gtcgtgtgtc  180
atgtgctgtt tggcttgggg ataaagcaaa tccatacaa accaaacaac tccagaaaac  240
cccaacaatt tcatgttgtc aggaagctta ctttaaaaga ataagcttaa caaacactga  300
    
```

taaggctgac actctagatg catcttcaag gaaggcctct acggaaggca caagggagct 360
 ggggctggac tggctccctc tgggctttga ggccaagtgt cctgcacaga aggccctgca 420
 aaagcaaaga ccaggtggca gcagcaccct tgggctttca aaagtgaag ggacaacgca 480
 tgggaccng aatggantgg gaaaaggatg gaatgcaaga ccngaaaggt tccccctcta 540
 aaactcn 547

<210> 8660

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8660

ctttggttgt ctacacagac acttaagtac tgtatcgctg ttatgcagcg gcctgtggag 60
 gcccctgggg gtggctgggc ctgtgtcctg agccctcagc cagatccagg ggggtgcggtg 120
 tctggctcatg tccactcaa gagcagtagc accatgtaga aggctgtgag caggggtcccc 180
 tcggctgagt ggcagatgta ggctcactgc tctgcagccc cgaggggctg gccagctcag 240
 agtgcagaag agttcctctc catgggtcta gtcacccatc cgtctgacct ggacgctgtc 300
 atagctcatc cttgggcttc gattcactgc ctgagagaga ctcttgtgca gggttcggggg 360
 ggccctgctg ggcatccatg ggctgctcct gggagaggtc catctcttct gggctgaaga 420
 gcatcttcac caggtcatct gcctgcaccc tgtcccgtc gctgtgtcga ggggtccaggg 480
 tgaaccacag ggcgatggca cancgcttgc ccctgggtgac agccttcatt catgnggggt 540
 ttcagtgcct gaan 554

<210> 8661

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8661

ggatattaat cccatggtgc aaggatttcc tgcaaagtac ctttaatgtg tttaaatcag 60
 cagcaagcat taggacatgc tattttggcc ccataagtta ggtgtgtagc actacacatt 120
 agacaccaag tcatcccaac caatatttat ccatatgaac agataaactg aacaaaaaca 180
 tagttctgat aaaacctgca ttcacaacct aatgtagttt aaagtaaatt ttttcacaat 240
 tgagggtgc tatttaggac tgttttgtta ataataaaaa caggaattat atagaagata 300
 aaacaccatt ttttactgct atataatgtc ttgctatata aaacataccc tcaacaagtc 360
 aaaatattta aaaccagtgt ttcaaatacc aaaaatcaca gctatgttac tgttcagtaa 420
 ctccactcaa ataaatgtta gtactgcatt cttgaaggaa aaaaactgca gcccaaggcaa 480
 gaactctgaa gttttgcact cagagtttaa aagacagacc ctactntgca actgaanact 540
 gcccttttgt ttna 554

<210> 8662

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8662

agaaaaatct gtcaattctg tttccggtta aatgtttact tcaaagaaat ttttatatag 60
 gctgaggcta atatattcaa gagtataaac acttttcctt tggattacct aaaaacaaac 120
 ttttaaagta tcataattca attgactaaa aatatagcca aatctgtcac aacacaacat 180
 aaagtaatgg acaattatag aatattttta attaacagta acaagccatc tacatcaaac 240
 cttatttcca actaaaacca aacaaaagca caacaatccc gtagtgtacc aagtgtgtat 300
 ttcaatttac tgtatgcaat ctaacaaaaa ttiggtcata attaccaga tatacataaa 360
 tgatttaagt agtaaaagaa aattcagctt caagagagta agttcatatc ttgaggaaaa 420
 gtaaaagtac attaagaatg taaagccaag tccagtttct atgcaataag tgaactgtag 480
 tctaataaag cagatttagg tgatttttag atatatatct tggtctttta tatatattaa 540
 tatatagn 548

<210> 8663

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8663

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acncagatgg ngtaatatat ttatataata aaagatgaaa atagtcactt tccataataa 60
aaataagttc ttttttttgn ttattttaca atatacttaa tattctcttc ttctttacct 120
tcctctccag cttcatttcc ttcattgctga atcaccaggg ggtcccatat ggctgtccca 180
actccatcaa gctggagttc gagaggnggc aggcaggcgg gcaggggctt aggaacacgc 240
gaggcagccg cactctaagn gtctctccac ctnttctaca aacgaggagc catccgngca 300
ctggaagacg tatttccgcc gcttgctgcg ggtgggctgg cagcactggg gcccacagcc 360
cccacgacat tccatgatgg gcaccttggg ggctgtggca catgatgcat aacctttctg 420
gcggcggatc acctctcgga ctacttgctc caggcacgga ttctcttgnt ggcagtgtc 480
gcccgttaaa ccggctggca caaggcagta agggctcccc tgggctgana ngnggc 537
```

<210> 8664

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8664

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gttttttgga aattgtttta ttttaaaatt accttcccaa caaaccatga aacacttgga 60
tgttacttta tggtttttca ttgaaaacat actacattgt aaatggtatt tcaaagtcag 120
acatagaatt gatcaaaatc taaggacaat attatgtaag gacaatatta aaaatggata 180
gaaaaagctt catttggtga ggtaaatcta aaggatgcat aaccatgtca cggtggacgg 240
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tactttaaat aactgaagcc caaggaaaca gttgttttaa agaacttaac agtcagatag 420
ctacataatt tagtaaatta aaatcaacta agacaggtga taattggaat gtctcaaaac 480
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tatnccactg ggggaaaata cccctgtccc caatttggag gtggtnaagc cgaccctcag 540
gaggttgaac aatg 554

<210> 8665

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8665

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ggaaaggcca tcaccctccg tggacggggt ctgggccacc acatccacct tctgaagggtg 180
gccagacac ctccacgctg ctgactgcac ttcccatcaa aagggactcc ctggggcana 240
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tgtccaaggt ggagtccacc cctcctcgga gcactcagcc caccagggtc caagcagccc 420
tcgggagata ccacgcggcc gnccacgtnt caacttggaa aaaagacact tcaaagaccc 480
caagcttaag ttntcggggg ctggctttct tgggnccctt gggtctggctg gttttcccg 540
gggtttttaa aaacctn 557

<210> 8666

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8666

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taaacaacaa aaaaactccg ccataagaat ttttttgcac tttttttta aaaaacatcg 180

acattacat cgctacatct ctaagctacc tcagttctga tttttaaaaa gcacctgctt 240
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 ttttatttta atatatatat tttatatatg tatatgtatc atatatttat ggttccttgg 480
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 ccggatggcc caagat 556

<210> 8667

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8667

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 gttaggcgtc aaattagtag tgacaatctt ttttttaatc ttgaaagtec ctagttttta 180
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240
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 gctaagacat gggaccagag aacacgtcaa cgtcaggccg ctccaggaaa accatccaca 420
 aagacaacag aagctaacct gaggtcgaca ctgccatgaa nagtggtggc tgaaacccgc 480
 agttaccagt gctttactgg acgcgaacat ncctaaggac ccggtgtgtc tggttctaag 540
 catcctgacc cn 552

<210> 8668

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8668

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caataaatca cagtaatcta ataagcaaaa ctgctaagaa aaaggcaaat ttaaaaagaa 360
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<210> 8669

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8669

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ccccacaga ggtttttcaa acctgttgta gcttgactaa aatgttcaga atgtatgatt 180
ttaaaggcag gtctctttat acaaagaaac tgctggcatt cttgactagt gaagaattat 240
ggcagaaagg cccattcttc tgagtctcaa acatgggtcca agaaagcata ttctgattgt 300
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ttaagtcitt cccctaaata tatgatatcc cctcctcctg ctccattgaa ttggcacttg 480
atgagcagaa gtcaagtgtg agaaggctga tctgnggcag tcattcncaa gaganccctg 540
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<210> 8670

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8670

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agaaaatata caggacaggg tggagatgag ctcttgaatt tagtaggggtg aaagagttaa  180
ctgccaaccc ggcactatca ttgtacttgt ttggagaaaa tctgttttgt tctggtgatg  240
atggttttat cttccctttt agttgggtgg gaagtaacag aaaatttgtt tccccaaaag  300
tttgacattt tcttgttaat acacgtttca tttcagtagc atgccaactg ttaagcctgc  360
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agcttgtctt cttacagcat cgagttgttt gctttattgt tagacacaat attagcagng  480
natectttcc gnattcccta ccatngaacc cnttnaganc taaaatc                    527
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<210> 8671

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8671

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tccctagaag catgcgggga tgggagtact gggaggaggg gctcggcggg gtctccggct  180
gcacccgggg cccaggtggc tctgcccag acggccgtgg gcctgttaca ggaatcttga  240
tggcaagttc ctttcttaga aaaccaggat gtgtacaaag tgcctgtgtg acacttgggg  300
agcgggggtg gggagcccag gaggacgggt cagcatcgga atcgcccagc ctggagtcaa  360
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aggcatcagg agcctccagg ttccacagga aacttctaga aacacatctc actttctgga 420
 aactttgagt ccnactgttg cangatggca aggggtggcgg gtattttngg cctactggnn 480
 tcaagggccccc nggncaaggg cttt 504

<210> 8672

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8672

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 cagggaaga ctgtagacac agaaataaat atccgattat aagctgtgat tagaggcatg 180
 atggaaaaga gcaaggcttc ctgagagaaa cagggcgagc acaggaaaac ctctctgaga 240
 cagtgcacatg aacttgaaac ttgaagggtg aacaggagtg ggcaagacaa aaggggaaag 300
 aaggaatgtt ccaggcagag agaaagagaa aagaccagcag cacggtatag agccgaggac 360
 atctgaggaa gaaagggccg ccgggggttg ggccctctgg gtgactggga gaggaaggcg 420
 ccggaatgga tccagattaa atcggatgct gtgtgccctg tggaaacatg ggggtggcct 480
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<210> 8673

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8673

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 ggactacagg cgcctgccac cacgtctggc taattttttg tattttttta gtagcgacag 180

ggtttcaccg tgttagccag atggtcttga tctcctagcc ttgtgatcca cccgcctcgg 240
 cctcccaaag tgctgggatt accgcgcccc gccgaaagtg ttttaaactt ttgtatacat 300
 gtatttttgt gtaagaaagc actcaatcct aatgagtatg cccaacatg acttgtttgg 360
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 cattaactca aacagatgtc aaagctttgc aacactgagt tacacaaaag cctaantagg 480
 tagacaagga tgggnaggct nangtgggaa ggacacttga gttcanggan atcaanaac 539

<210> 8674

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8674

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 ttctggcctc anactctttg gttcanatat cacctgtaca agttatgtga cattgggtcaa 180
 gtcatgtaac ctattttaaaa cctagtttct tcatctataa ttggggataa taacagtaac 240
 tatgtcataa agttgtatgt acatganatt gcctgtaaag tgagcaacaa tgcctgcaca 300
 tgataaatta taataattat tacatgttaa taattattat cttcataatc ttctaattgg 360
 ctgaatcata ttctcttata ttttgaaaaa cgataatgat aacccatgta aaacaaactc 420
 agataaccag aaaattcaat taaccaaaca cagtcttaag ctatacttca atgatgactg 480
 ctaacattct aagattctcc acatagtaga gactactntg ag 522

<210> 8675

<211> 351

<212> DNA

<213> Homo sapiens

<400> 8675

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 tggggaanac aagtgtgaac atgaggaana cagggatgaa ggtgtgaaaa cagatgtgag 180
 gataagaaga caggtgtaaa ggtgagaaag aggccggnca tgggtggctca cgcctgtaat 240
 cccagcactg tgggaggcca aggcanatgg ntcantngan gtcaagagtt cgagaccagc 300
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<210> 8676

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8676

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 tgtaccagct actctaccta ctacagacta ttttaacttac ccaacaaaat caaaagaggt 180
 tgctgaccag atttataggg gacataactg tttatattat caaagtgttt gcataaccaa 240
 aagtacaata ataaagatga aaatgcctcc tatttctttt agaaaataat acttaataag 300
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 agaaatgtat acttgaatta tgatagccca tccatcacag tttaatctaa aaatgaaatt 420
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<210> 8677

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8677

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 tggcctggat tatcatcggc tggaaattca tggttgatgc aagtttttat tgataacaag 180
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 ttggccagga gttcctattt gttgctgtaa gattcaaata atcaaaatac tagaattttt 480
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<210> 8678

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8678

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 gtgtgtgttt gtgtgtgtga actgtgcaaa gtacaaagga tctcccagtc ggctgagcct 180
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 tggcccccca aggccactac atggctaaga tgtgtacatc atggggccag gatgaaacat 420
 aagggttagt ttcattctta cgcctaaaca tgtgtaccct ttgaggcaag atggcctgaa 480
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<210> 8679

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8679

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<210> 8680

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8680

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agatgccatt gtttacaact gattggacat gacacaggat acagtaaggc acaagtggac 480
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<210> 8681

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8681

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atcgtgcccc atttaaacad cataaaaaatc tcagccttgt cattatttac aacccccagc  240
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tctgagctgt ctggggtttt tgtaagaaca tagctttgac tagcattgac caattgattg  480
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<210> 8682

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8682

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cgccacgggg gcaggtcagc gggacgggga caggaggtt ggtcatcgaa aggcaggtga  180
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ggggcacgca cacacacagg cacgcacatg cttgcccatg aacaccccc gggcacacac  420
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acacccttgc acactcccca cctccctcc accccagaca catcagcaca agcgggtccan 480
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<210> 8683

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8683

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<210> 8684

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8684

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attttcaagg cccctaattc tacctcgggg actttcttat 520

<210> 8685

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8685

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tctcacaaaa tgggtgccata atggttaaag cttaatgtct tgctaataat caagatgtat 300
acacaacata aaataaatag aattgcttgt tgtctgctga agttcttggc aatgctaagg 360
taagttatca ttttactctt tccagttctc aatagccagc cctcaaagag caaggggtgg 420
taggacaaca ggaatgagtg gaaatggctt ctctggcgga tccctcctaa ctgcagtcac 480
tcagtctagc aggctcaact tncactgggt cttctgggtg accttg 526

<210> 8686

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8686

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<210> 8687

<211> 512

<212> DNA

<213> Homo sapiens

<400> 8687

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 gaaaaaaaca ctaatcaatt aaaaatatcc gtccctcttc cccactgcta cagcaaattt 180
 aggataaatc tacagcattc acttacttta gctggttctg atactgagga atactttttt 240
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 caaacagaat agttcagggc caatgtagcc agagcaatgn gaatgntctt attgctccct 480
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<210> 8688

<211> 480

<212> DNA

<213> Homo sapiens

<400> 8688

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aacaggacac ttaatttgct aaactttatt ttatacatat acgtttacat ttactagtca 60
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acagttacag gctttggtct ctccaagaat ccaattcacc cctgggtttc gcttggcaca 180
caccgccagga gaacgtcgat gcacacagct gtgtagctgc aaacggaaac cactctcttt 240
tctctcgtat ttttcagtca gactcactca ggattttgaa atgaatcatc acgagaaatt 300
tgttttaaag ttgaatcact gagaacatct aacaactggt cacattcttt atcacaaaaa 360
ctgaagtcgg aaaagacgcc ctgaaaactt gcaagggcta atactctatg atagaatatt 420
actactgttc accatgntaa nacatttact tactaccata cncctgaaca gncncggnan 480

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<210> 8689

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8689

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cctcttttaa aaactctatt tggtgcgtgc ccacgggtgct gcgtcccgtc agacatacct 60
gtatagatct ctctatttat atatatatat atataaaagg ttcttttagca gttaaataga 120
ttccaatatg aacgtctccc aggacaaagc tgcgtctcgc ctctgggtca cacgcattctg 180
tgcggctggg gtgtatgtgc cgcgtcacag cagtaccata taaatacgtt gatttgaacg 240
cagtttccct gtggnggtaa aaacacattc ctgacaagtg acaagcagaa gagtccggca 300
gctgcagcgc ctcaactcggc tgggacctcg tacttgaaga tgacgtgaa gagccggccg 360
ccagcccgtc cggccagcca cgcgttcttg atgacggcca gcttggaggt tttcgaacgc 420
aaggctngct gggaanttgg ggtganagga acgggccatg gccttnatga cnccaaatac 480
cggccaagnt tccggacaat gn 502

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<210> 8690

<211> 468

<212> DNA

<213> Homo sapiens

<400> 8690

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gatagccaaa agcaatttat tatagtttag cctcaaaaaa ataaaaataa aaaaattatc   60
cagnggttat gaggagtcta ggaaaacctg tcccagtaat gccaacttgg aggtgaaggg  120
ctgactgggg cagctganaa gtgggacctt ctgtttggca ggcttcctct cccttgcctg  180
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actaacagtg tttttctgaa atttcgacct gcaccgtttg agagagtaga attccctcat  300
caagtccctc acctcccact gctcttcctt cagcctctgg cagcagtgca gggcggcagg  360
gtcgatgggg tgagcttctg tgttgaagat gtacccccca gccccagga tgcactcccc  420
atagggggtg atcaccngt cnaaggtgga ccnnttggtg nggannaa                  468

```

<210> 8691

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8691

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aattgctaag aattttatgt agcaagtttg tttattcagt aacataatca caaaatagaa   60
atatcacatt cacagaagtg gaaataaaga gcataaaata tttttaaac aggaaagcaa  120
tgggatcact ttcaagagcc tcaaagaaaa cctttaattt acaatgctac gctttcatga  180
ttaataggat taatgtgtgg tttttctttg ataaaagtag tcatgatttt ttagtattac  240
atacattcat tgcatatgac agacactctg ataaaaatgt actgttctaa ttacttaatt  300
gttttggtc atttaacacc ttgtttaaat agctttaaga catataagag gcaaataatt  360
atatatactt aaggataaaa ttttcagata tttatccaaa cacacattta cccattaaat  420
tagaacacca actgcttaat atgtaaaact agtttgaaat catgactctt gattaaatac  480
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<210> 8692

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8692

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aagttttcat ggttttaaca tttattgtaa gtcctagatg aaacatactg aaaagattat   60
ttttgcttta atcctaatat gctaagaaaa gttcattggc acaaatatcc agaggatatt   120
tacagtttca tttacctttg gtggcaaaga gtattttgct aaccgtatgg atacagtcag   180
atagtttcca atgcacagct ttatgctaaa gagaattcaa atgtgtctct tttttttgct   240
aaaaaaggga tgtaaaaagt ccaatatgaa acagaacgag tgcaacacga aatacaaaat   300
atgcctatca tgtaggcttt tgaacagtta atagctctac gtgttatcta taaacatitt   360
ttactagtaa catcactatt gtataaatat taaaaacaaa aatgacatta aaaaaatagc   420
atatgaactt tacaaaaatg gctactttna gntttcctaa ctaaaatcgg aattcaaatn   480
cncaancaaa tttncctacc taatcaaacc cncaccagg accggttttt   530

```

<210> 8693

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8693

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aacagaaaaa agtcaaatga caattttaat agacttttaa acagtgtaca agtaaaaaac   60
actggttttg tatttcaaaa gttgaaggaa gatatccagt cattaaacag tctacaaaaac   120
atatgccagt aaattacata aaagactatg tacaatataa aaagagctga aaacagtctt   180
cactgtaaaa ataattttaa acaaactttt caatttaaaa tatcatctat agcacacaaa   240
catcatgcaa atggaaaact aaatatactg cattcttttag ttagccaaa taaattcaga   300
ttgagacatc ttataagtag ggaaatggcc attcaatacg attttttct ctggcagtaa   360
tggtcctagc tgggtgtttt atgcataaag aacagctata tttcaaacc tttttattgt   420

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aataaatact aaagcaacag aggaataactt tattaattta ggagtgatgt tcaaaaatgg 480
nctgaaaaat aaangctn 498

<210> 8694

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8694

caaataccat actataccca attttagtca atttgtaaata tataaattat attatttgtg 60
ctacagtttg tgacatttaa atcttattag aagataagca ccaaacctat taaaataaaa 120
aatagataaa atgctgtggt tttcccagca gcaggatatt gtgtacgtcc ttaggctgt 180
aaacttatgc tcccttctcc tgaaacaatg ttttgataa acttgccctt ctcccttgaa 240
acttttcctg aaaacagact ttgtctttaa ctgtagtctt ggaaaatgta caaaagagca 300
aaactgcccc tctcggcggg acggccgcac gttacagaaa ggcttcgtct ctgctgctga 360
tgccaccacg agccctgccc agcgttcacc aggagggcgg gctgcggccc ccggggctct 420
ggggagggtc tcaactcagag ggtaaaaagc tccacagaag agtcacccca gagcacctgt 480
cggagaccct gcgtcccttc cctnangggg ctgnnaan 518

<210> 8695

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8695

cctcttggtt atttggttgg tccagctaga tateggaagc cactcgaact tttcgggaaa 60
gtatttgga atttcaatct tctccacggg aagacgatag aaatcgga ctctctgcct 120
caggagccg gcagtcacac cctgggccc gttccacacc aggtccaggg caggggcata 180
ggtcctctca ccagggatgc gcacctgtgt cctcagcagc acgtcctggg ggcccaagtt 240

ttcgcttttc tgaaggggct ctaagcagat ctcaattctc cgtcctagtt tatattccct 300
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 tctgaggtgg gctggggacg ggacaccgaa ctccaggaaa ggaggcaagg tcatggcctg 420
 agacttcagc tccgccagcg tggcatcttc tgagatctct atgtctccca agtagaggag 480
 agaaacttgc gcaggcttcg ttcccagaag caccttggct ggaagtggct n 531

<210> 8696

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8696

gatataggag atttggcttg tattgtgcaa ggcttgacat aatgggacta ctaggcttgg 60
 ggattctttc atgagaattt cactaagaaa acaatagttt tagtctcaat cccttcatag 120
 ttggaagcat aatgttcctg aaccctccac tcccagatat agacaaatat ttcttcttcc 180
 aaagcagtaa agaggtctag atgagctgct ggccatttag gggtgaggga ggcatttgag 240
 ggcaactgggc ctggtcaagg agtaataggg gtattcccag gagctactaa aggctggctg 300
 ctgagctcct gaacagggtt gactgggtggg gatccctcag ggccgagacc aggtggcgaa 360
 cccgccgctg ctgttgcagc caatagagca tctccacttt gtcactcttc atcttgtcca 420
 ggtagggccg ccccttgaaa gaatcactgg cttegcccaa agattaactc tatctcctta 480
 nganggaac ccaagaagac tcnnttaagt tgaactttct gnngaaaagg ctttcg 536

<210> 8697

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8697

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tgctttttct ttaggaaagn gctcacactt tcagctgcgt tttctacagc tcctaacttg 120
aataaaaaaa atagngcagg taactttctcc attttcctta gtttttcaac tanaagngga 180
aacatggnga tcatgttttc tggactcaaa tctgcttcag gactaanatt ctgaagtncc 240
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tcttcatatt tcctagcatc catcttttta atgactaatt tatngttaaa atgaatgaag 360
ttttctgggc ncagttcctg ggcccagggc caacttttcc aaatttgaaa catggcatca 420
tacagctgga tgctttctcg aggtgaaagg gtaagatcag gaggggaatc catacctttc 480
aatatgatcc gttggtagtg cagcnca 507

<210> 8698

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8698

aaaaaaacaa agcaaaccct gggatcaact ttattgctga tggctgaagc ctctcctcc 60
ctatcccctt ggtctttcag gnggtccaaa gcccctccag gatagcacag tgcttaggct 120
ctgctgggcc agaggcaagg gagacaatct atctcccag cctgccctgg ccagtcctt 180
tcctgcccc taccacccc tattgcacat caaatcatgt aaacatggct atggggatgg 240
cccanaacag cagtgaggca gattgatgtg taaacagatt tgggatcagg ggctagaccc 300
agtcaccag ccctaccca tgctgaggcc acagttaagt atggaaaagc aggaggtcct 360
gtcccaaac tctggctcan attatgcaat agtgcanatg gctctgctcc cctctgccac 420
ccacctctc agattccagg tcctgaggtc caagtagcct tgggettccc tccaggccta 480
ggcagcagat ggcagtgtcc agttttttcc ttc 513

<210> 8699

<211> 434

<212> DNA

<213> Homo sapiens

<400> 8699

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agtttttttc tctttatttc ttatggataa aatgcgacat acatattcta cttacaatg   60
aaagctgatg ggacagaaga atcaatatta gcttttgaga tgggcaaaga cataaaacat  120
tggcgttttc tagtgtcatg atttgtcaaa ttagtttttag aaaatggtaa atgtctgaca  180
gaaaaaaaaat ttttaattaa ggtgtatgta agtgtgtaaa actgttaaaa atgcttgaaa  240
acaaacattt taatcccatg acatattatt tttatttgtg gaaaacagct aaaaactgcc  300
tgtcagagaa actatttaat cctttaacat aaagtctttt aaggcacata aacatttatg  360
aagaacagtt gaaatatgct cgctaggaag aaggnnccatt ttaactcata tgagcattca  420
gtcaagngaa nncn                                     434

```

<210> 8700

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8700

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aaagtftatt catgaatggt ttaatttccc tttaaagcta gaaaataaag atcatttacc   60
ttctgatctt cgtttttcca aatggtaata agcattgatc cttccctcta ataaagggtga  120
aatttttaaa atctcagtga ataggaatgt gcaaagctct aagaaaacta ttacttgaat  180
gtctctaaag tggtagaaga tcacaagttg ggaataccct caaaaactat atttttaccc  240
tactgttaaa acttgttttc aaagtgggtg aatctgaaag atcacagttc aaaagtaatt  300
cccatacca ataatatcaa ctttaggtga acatctaagt atttaagagt attatttttc  360
ttggctgggt gcggcagctc acacctgtaa tcccagcact ttgggaggcc gaggcaggcg  420
gattcaggag tttagacca gcctgacca catggtgaaa ccttgnctct actaaaaata  480
caaaaattac cggggttgt tggctcacac ctgtaatccc agcttctcag gcggctgacc  540
ntgagaatcc tttgaacca ggaggcggaa ntgcatgagg ggaa                               584

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<210> 8701

<211> 588

<212> DNA

<213> Homo sapiens

<400> 8701

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cttaggcacc agtcttacgt atatgaagtc actttttcat tccattgtac aaaactcata  120
ttttgagaaa aatctaatag ctaatagtct ccaacaccat atgatacata tccttttagct  180
taagtagaga tctacttatt aaatgaggca ccatcaacct aaggaaagat aagctgtaag  240
agaatgaaga cagaggtata tcaagtaaca agaacattct tccttatcag gataaaatgt  300
ttatcagtat tcaaataaaa tatcttaaat ggaaagagac aggaaagaac atggttaaat  360
cacagaaaat gaagaaaggg agaagctgat catgatcttg tgcaacatta tgacagcact  420
aaggnattac cgtatccaat acaaggatac ttaatagacc naagaattta aaatcccagg  480
gaactggaat accagcccca aagaagcccc tctttgtggg ggtcacaccc caaanggcatt  540
caccaatttg gaaattttta atttagagac nncnggtttt tnttggng                    588

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<210> 8702

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8702

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gcaaccatag tgtgaacgtt cagcattgca tactgaaaaa ctttgaatct catgtaagaa   60
ggaactgggc tagagacagg agccaagatt tattaccatt tctaagtttt atgagttcta  120
ttgttttcct acctttatta ccagcgtag ctgtaatgag gattctagaa aaaagagctg  180
gaaaaaagaa gcatcccta actcccacaa tgtagcactt cagttctggc ctcttttagga  240
ttggggcagt gtctcatctc tttatttgtt attcgtagac agtaagaggg agtctcactt  300
actacttgga aaagttttaa agacctata cttttgtgtg tgtgtgggaa ctaggccaca  360
aaagtgcatt atgaaagagt ttccttacga tcatgtccgg attcaaattt caagtagttt  420

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gcatgatctt catgtaatat ctgggacaca ccttcataat tgacaagcct tttttttata 480
 taataataag aatggctaaa tggagtgagg gatatacttc attccgcccc atgaccttat 540
 cttttcaggn gggaaatcaa tggcnaaagg aaatggctct tccaggn 587

<210> 8703

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8703

aagcttctca aaacacitit taattctcca tttttcccat caagaccaa gttgtacaaa 60
 caggtacaaa atccccacc ttcagggtgt gaggcatcac tgttgttgtt caaagtccca 120
 tctcctcccc tttccctttc cacgagtttt caagatgtgg ccagtcagt gcattgctgc 180
 cttctatgac ctatgaacca tgggcagcaa gaggactggt gaccggggga catggtgagg 240
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 aggtctcagct ggaggccgca cagaggagaa atgtcactct gtcccatctt ccttgcattc 360
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 gagatgcaat gntctctaac cattattctc ttagaaatta aggggtggcgg ggcnggaatc 480
 aaacnnatgt ttgaaatggc tttattctc ctagtggcta atgctggtct tgggtttatt 540
 tgcngaaata aaccaaagt gnantaaacc accntcan 578

<210> 8704

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8704

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gagcagctgg ttggaggag ccagggccag gccccacctc ctctcgggac caggagactg 180
gcagccgctg tgttcacctg ggcagggtgtg caccagtgca cccccactgg attatggtgc 240
tggtagcatg agagggtgtg tccacaccaa gggcagggtga agatgcgagg tggggctgag 300
acctccttcc cacaagagga ggtggctgag cctcccaggg cctgaactct cacagcaggg 360
ctcaccccca agcctgtatg cttagctctg actctctttg gacaataaaa taaagtgcac 420
tactgaacaa agagtaactc aaaaccagaa tcagacaaat cgccangntt ttccttagct 480
naangacnaa ngaaacntga atgat 505

<210> 8705

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8705

gggggaggca ggccatttat tgaagaactg cttgcagaca tggacacaca cagccatggt 60
aaccagacgc caccctgggg ccaggagca ccagaaaca gccctgggct gccagcccag 120
gcctggacat ttgccacca cgggtggagg gcctctcttg gcatcaacca tccacgacct 180
cctacggcac catctctcct gccaagtgtc ccatgggggt ctccaggaag aaaaccagcc 240
ttgggggatt ccaaggccca gggagggtgg gaagctgccc acgccctcag gctgtgcca 300
gtctcatgct caccatttct ttctatggcc aaagggaagt cgctggacga gggaggtccc 360
tctgtggga tgagcagcac agcacggctg gggccccagg tcacagaaat ggggtgcaggg 420
atcctgggac ctgggctgga tgggcacccg ctttgggatt tcctctggtt aacctgtgta 480
tggtccaagg aacantgtag gaangggctt ggcatgggt ggggcttgca tgtccgggct 540
tttcgtaac ccaaccaana tcttcnggag gaacagagga gang 584

<210> 8706

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8706

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ggtttcctct gtcactttta attaagacac aagttagagta agcagcctcc acaggctgta 60
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tggaggagtg agactgggtc cacagtgaca ttattgctga cctcttctgt gtgaggaaaa 180
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gtagagcaac tgtggggagg ggagggccag tcccctgctc agtcctgacc acataagcct 420
tggtcacagg tgtaggtgga nagggcactg gcggacactg ncctaagggtg catcctgagg 480
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<210> 8707

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8707

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atgtaaaaaa gaattgtatt cttttacata gatcaacaca aaacagtaca ttgcctttgt 60
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attttatggg tcctcaatta ctgcagatag acagtacagt aagagacagt acagtaagaa 180
ataaaaaggc tgaaaggaat gttttggaca ttataggagg cctaactttg ggtgggtgtag 240
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cagtcagttg atggctacaa gtgttaagta ccacaagccc cacctctatc tctgtatgtt 480
tagagtgcaa atattttccc catgcttctc gtcccctant cactgccacc ccccttcggc 540
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<210> 8708

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8708

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gaacatataa aaataccttt ttagaagcct ctataagaaa gaaaatacaa agtttaaccc 180
cacaactttc ctctttgcta gaactgtaaa ctactgctac agttttaaat agactttttg 240
ttgtttaaac tatacatcca ggaaaatcta aaaaaattaa agaaacgtgc atataaacga 300
ttgcatagca gaacatgaac attaactgca aacagtaaag aaatgaaagt tagaaatact 360
atcaaataa caaaggttct agaatcaatc ctttaaacac attccacaaa cagtatttaa 420
aatccatcgt tgtattcttt acaggcaaag cctagattac taaaaccgaa attgaaaaaa 480
gtaatcctct aaaagggaat cgtttgccat aattcttact tgnatctgta agcagcaatc 540
tgagatttta aaaganctac tttttattct gaaangaaat ggac 584
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<210> 8709

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8709

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gagatggagt ttcgctcttg ctgcccaagc tggagtgcaa tggcgcaatc tcagctcact 60
gcaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gcagctggga 120
ttacaggcgc ccgccaccac gcctggctaa ttttgtattt ttagtagaga tggggtttct 180
ccatgttggt caggctggtc ttgaactccc aacctcaggt gatcctcctg cttcagcctc 240
ccaaagtgct gggattacaa gcgtgggcca ccacgccaag cggtgaatgc ccatttagtt 300
gtattcataa ttcccgtgcc atgtgttcga attgaattag caatatgccg aatattaata 360
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gtattcaaat gcttggttatt gcttggtcgt tcaataaaaa tctgattggt gagattatag 420
 aggtatcggg acacaaatat atgaatgttt ctcataatct ctaaaacatc aaggccctgt 480
 tccaaagtct gactgggaag atgtgcctct gcataaccag ccataacgct gagcagctta 540
 agttctcatc tcactataag tggncaccg 569

<210> 8710

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8710

gaggagcaaa cgcggctcat ttattagaat atgcaaaaga gaggactttc ctccacaaat 60
 acagattgct gcttctcagt ttctatcaag agcaagacaa cagttgaaaa ctgtattcct 120
 gagaagaagc aaaaaagtta tcagtttaca aacaaggata acaggtgatt tcaacaaaag 180
 ataagaaact tttttttcca agaatacaaaa tttcaagtat tattccanat gacatggcaa 240
 agctagcaca ggcggaagcc aaggngcccc tcaggctctg tagggtcttg gaggaagggc 300
 ccgggcagca tgaggggagcg gcgcgtcctg ggacctgcct ccagccctgg gcttggggcc 360
 gtggtcactc acacaaggga gcagcacgtc ctgggacctg cgtccagccc caggctcggg 420
 gcccgcggtc actcacacaa gggagcacat gtccctgggac ctgcgtccag ccccagcttn 480
 gggccggggc acttaccggt aacaaggacg ataacttgnn ggccccttga gggtacaagt 540
 tttggncttg gaaggtt 557

<210> 8711

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8711

cagagaatgg cactttattt ttaagacttg atttttttgc catgattatc taccaattct 60

tccatgatgg tgtcatcctc ttcaacagt accaggacct tcttgcccac tagattaaag 120
 atgtcttcag gaggatagcc tttgggctca cccaccttca cggtagagcat gtccattgtt 180
 agaatggtgc cttccggaat tttcactttg gccaccacag acttgcccag cttctcattg 240
 caggccatct cacagggcag cagctgcttg gttggggagc ccagggcacg ctccacaaga 300
 cgcactgacc gcaccagctc ggccagttct ccaggctcca gcgaggccga gtggtcactc 360
 cccttcagg tcttgtccaa agttatgtga cgttccaaca ccttgggtccc cagagccact 420
 gcggccacag atatcgctat gcctgtttca tgcccagaat accctatggg aatgtcagga 480
 aagagcttct gatnttccna nannaccnc ang 514

<210> 8712

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8712

agggtctgcg aagtttttaa tgttcaagg gctgtccgtt ttgaaagggtg aaaaggaatt 60
 aacatattta ggtccactca tagggaggag gaaaaagaaa ttctggcata gcacaggggt 120
 caggaaacta tggcccacca cctgtcgttg tcagtagttt ccctggagcc cagccatgca 180
 aatggttgac atgctgccga tggccgctct gcagaatcgc tgggactaag accacaggtc 240
 cagaaagctt caaatggta ctatcgggcc ctccacagaa gtctgcccac tctccataca 300
 gcatatgatg aaatacactg cattatactg aatattgaaa aaaaatatac tgcagctact 360
 gaaaaataaa cacaaagtgt atatacaaac agggaaagat gttcaagaaa tcatgaagaa 420
 agttttattt taaactctgc ctggcttctg agggccacaa ggccccgtca attnggttcc 480
 tanggttcca tggagaaagg aattgaagtc tttggnaaaa ttganccttg ggangggtaa 540
 cnaggacttt gggcacantg gttaacgggg tcccaccgg n 581

<210> 8713

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8713

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acagctgggc caccgggggt gacatcacgt attggtaggt ccatgatgcc cccctgagcc 60
acaaaaccag caagttttta ttagggattt taaaagggga ggggtgtatg aacagggagt 120
aggtcacaaa gatcacatgc ttcaaagggc anaaggcaga gcaaagatga catgcttctg 180
aagaaacagg accagagcaa aatcagaaac tcctgataag ggtctatgtt cagcggtgca 240
tgtattgnct tgataaacat cttaacagaa aacagggttc agagcaaaga accggcctga 300
cctcaaattt accaggactg gggtttccca atcctagtaa gcctgagggt actgcaggag 360
accagggcgt atctcagtcc ttatctnaac cacatnggac agacactncc anagnggncg 420
tttatanacc tccccagga 440
```

<210> 8714

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8714

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ccatgaaaaa gattccactt tatTTtattt attattgtta ttgttatttt tacaacaat 60
anatttgctg caacatgctc tggctcatat tattgaatna aaaaatttaa cacatttcaa 120
aaatatcaaa aatacactat aatgagtctt aagactacaa tacgacaatg attgcacaaa 180
accgtaagat atgagcccac tgtctggatg acatccattg gcaacagtga gagaaaaccc 240
tatagcatct gggagaagtg catgaaattt agaatncaag gaacttatgt gtgactgact 300
gatcaccaaa tgaggcaaac agagcaggat tgactgtagc tgctttttct caatctagga 360
agngcttacc ccaactatgg ggcaaangtc actaactgga aanattaact tgccttnatg 420
atngggagtc gnaangcctc 440
```

<210> 8715

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8715

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ataataaaga atatggtaat tttaatgaca aaaattgtat tngaaatag cgcactctat   60
actgagatga atgaggggaa aaaagtcaaa actcctttca aaactatatt caaagcatca  120
gaaaaaattt ttttttcttt ttacaaagtt atgtataagt catagggacc accaaatact  180
gaaatatgaa gactctatga ccaaagttca aaactgattt taaggaactg tgtgaagcaa  240
gacaggaaaa ttgtatttta acactctata gaacttcaca gtaaagctgg aatttagaga  300
ctaattggctt aacaggagta ctgccaacaa ggcctttcct ttctcagaat catctcctaa  360
tattcgtata ccattgacaa gttgtaacag cagacttaga ctttngttt tcttaagatg  420
gggcttaata aggtgcacaa atatgctgat atcctgnatt atgagcatgt aaattattct  480
caggggttaa gaaaatcccg aaaagaatgt aagtntctca gtccacggct tgcntcatca  540
acaaaaggnc aggn                                                         554

```

<210> 8716

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8716

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aaaaaaacag gaccagttt actactgaag ctgcagcgag gttacagagg cgtcttgggg   60
ctcagtcctt gagctccggg acgccaact gggagtgggg cctccactct cctacgtaca  120
gacaccccca tagggaaacg ctacatgct gtctgtctgg gacgtgcag gcctggccgt  180
tctgtggccg catccgcgtc cgggtccctg tgtcctggct gggcgagccg gggagggggc  240
tgattcctgg gagcggttca gcagcgagtt ctgaatgtct tccaggactt cacggaagag  300
ctcctctcgg gacttcatgc cgtccaggta gaccattcc acaccgttgg cctccatctc  360
ctgcctatac ttctggtaca tgggccacac gtggccatcg aagaggccgg ggggatcagg  420
gactgtgtag ttgcgggtac ttctcctcca cttgcactct tcatacggga cggtcaggaa  480

```

gtaccggcgg ctgtacaagt ccaccagggg cttgtaactg tagagcagga agccttncan 540
gaagaagatt tnggtgtccg aggccttggc tgacctgacc cc 582

<210> 8717

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8717

aaaattatcc aaatgtgaac ttactggaaa gagaaaaaac aagtttaaag aagaaatttt 60
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ttataaatgn gtaagacaga cagcatttac tattgagtc tacagggaaa cacacagaag 180
caattcattg cttgggagtg aaactatcaa ctaatcttac gactactggt tctccaagtc 240
ccctaataaa gaaaatttta acctcatgat catttcaagg gaatttcttt ttcaactgnc 300
acataataac ttggtaacnc aggaccaata tacatgttct gagttttaa aatatactcc 360
acctaaacta tctgnctagt ttaatctttc tagttatcat ttaacctaaa atgagagacc 420
aaatcttatt tccattaaaa aaaatgaaaa aaaggcccaa tgganctttt tgaaagnng 480
taaaccctgg ggcttaaac aatccgntt atcaaccct ttgnccaaa aaacggttgg 540
cctnttgat taaaaatggc ccnccc 567

<210> 8718

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8718

agttttctat caaccgagaa tgtttttatt acccatcaa tcctgaagga tcatttcacc 60
aaataggaat ttggagtga cagagtttg ttttgaggca gtcttgctct gttgccagg 120
ctggagtga gtggcaggat cttggctcac tgcaacctcc acctcccggg ttcaagtaat 180

tctcgtgcct cagcctccca agtagctgag attacaggca tgtgccacca tgcctggcta 240
 atttttgtat ttttagtaga gacagggttt tgccatgttg gtcaggctgg tctcaaactc 300
 ctgacttcaa gtgatctgcc caccttggtc tcccaaagtg ctgggattac aggtgtgagc 360
 caccgtgccc agccacaagt tgatagtctt tctggcacta aaagaacttg tctcacttcc 420
 ttctggcctc catggtttcc agagagaaat ccactgtcat ctgagttact tttccctcta 480
 gttaagattt cacttctttc ttganctttc aacttttttc tggctttaag ttttcaaaaa 540
 tctggcctat catggacttn ttggggttac ttacttn 577

<210> 8719

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8719

caactttttg caaagcagca tagcaacaat cgtgattgta gcacttgcct gaggttgtgg 60
 tcacaaccaa cgtagtaaac atcatttgca tatcagtaag aaaaagaaaa caggaggaga 120
 tgagttctta caaaacaaag cagattctag agatttcact gtgtctgcat tgctccttcc 180
 acgcaagttc tcccttagct gaccgcaatc ttgttttctt ccaggaagtg aggaaactgg 240
 tgtttgggaa cgccgtcagt agcacttggg ttttccacat ctgcactgat acccgactgg 300
 gagccatcca tcttggagac agtggcgtaa ttcacaacgg aggtggcccc caaggaaacc 360
 gggagggtag gaaccccccc actctggatc acagagatct cattggtctt cacggccaga 420
 ccgccattga gcatgctggg gtactgggtc cacacaacag ggtccacatt cactgaaggg 480
 gccnggaatt ccttgggnaa gaattttggg actctttttc cgncccnacc taacaaancc 540
 tnggggtctt ganggccact tc 562

<210> 8720

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8720

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caggtttgca nagtgggaagt ttaatgggac catcaccgng ataccccatc acagcagtcc 60
caggctggag gccccaggct ntggccgcct ntcccagcat ggngggcctg ganagagcac 120
cagcaccacc tcccactttc cctgggggtat tgctttgccc ctgtgcctcc caccaccagga 180
agctacaana nacaggctgt cctgtcccca cactntccct gggtcctggg actccctgtt 240
ctgaggggct aaggttgcct ggggccanag ggccctcccc aggacaacc atcctntccc 300
tgngtccctt gccccccaca ctgaggggaat gtctgtgtcc ttgttctctt gccaggggcc 360
aactgaggct gccaaaccca ggggcggggt gcaagggtctg tgcggggagg gtggctcana 420
tccctgcaag gaggcntgct gcagggacag cacaccttgg gccccccggc agacattaag 480
gccaatgtgg cggcaccaat aggtttgttg ggcccttgcc ccggggcngg aacttgaag 540
ggcttgatt ccggggcttg gcccaattta atttt 575
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<210> 8721

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8721

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ctctaaactt ctcttctcac ttcatttcat ccatttgatc ttcaattact gatacctttt 60
cttccacttg attgaatcag ctactgaagc ttgggcatgc atcacatagt tctcngcca 120
tggttttcag ctccatcggg tcatttaagg ncttctctac actgttnatt ctagttagcc 180
atthttgtcaa atcttttttc aaggttttta gcttctttgt gatgggttcg aacatcctcc 240
tttagcttgg agaagtttgt tattaccgat catctaaagc cttcttctct cagctcgtca 300
aagtaaaagt ccagctttgt tccattgctg gcgaggagct gcgttccttt ggaggagaag 360
aggcgctctg atgtttaaaa ttttcagctt ttctgctctg gtttctcccc atctttgngg 420
ttttatcnac ttttggcctt tgatgatggt gatgnncaaa ngggttttgg ngngg 475
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<210> 8722

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8722

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ccttctttta cctttatatt gatattttaa agaaaaagaa catgatggat acgggaatgg 60
gggaaggagac aacggttcta cgattaacaa caggaactga taggaaccag aagctccaag 120
gatttaaaaa aaaataaaat atatatttat acatttatat atatatatat atatcacgtt 180
atgtatgtga gtcccagaca agcaggaagc agcagcaaga agcaactagc acacagaaac 240
accctgtcgt gtgcactaca cattcaagca aagccattcc tctagctagg acgcagcaat 300
ccccaccctc ccacctacgg gcaaaagaga acagctgaaa acaaacttcc ctctttaagg 360
gccactcagt aatttttgtc ctcttgcca ggaaaaagaa agaaaaacaa aacaaaacag 420
aaaaggtcga tcttgccttg aaagcgcca gnggctatit ctctctctgc caaagcagga 480
cacgtattct tacacagang gccacatngt gncentacaa tnccttanaca gt 532
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<210> 8723

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8723

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agtaataaaa gaatcattta ctattttcac tgagtttaca gtgttgggta ctactgnnta 60
catcatttta atgaaagtat ttataaaaac atctgcaata gttcatatca gaaaacaaag 120
tttctctcaa taaagacctt aaaaaataaa tttttatctt cattaaactcc ctttctggga 180
atgggaatga aataacatgc ttctgtttta aaaaaaaaaa aaaaaaaaaa cncaaaatit 240
aataccctaa ttaggtttct ggaaaaaaag actaccctag caataatitit taacattcta 300
catttcatct atttctaaag aactccctt taaaaaatct tttagtttta tatattagga 360
caatcaggtt tanagtctca cataaataaa atagccncat tagaaggcat actgaagaat 420
caaatgggtt agccacattg gctgntccat tcacggattc tctaanance gttgggagga 480
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gcctataaaa ctggtcacgt tagctaagta aaagggcnat ctgaccatgn tctacacctg 540
ngctttacaa aatccgattt ggggcccgg 569

<210> 8724

<211> 461

<212> DNA

<213> Homo sapiens

<400> 8724

ggaatgtcac tagacaatta aacttttatt gaagcgtaaa ttgtggtaca gaaatacatt 60
tcaactgatt taagtccaac accagtgaag ggagaaatta tggcaccaaa actttccctc 120
ttctatcata cgatgattta gattatgatt caaactacat ttctcttttc taggctttgt 180
cccataaaaa tttgtgcagt ttttcaacat tagaattcctt aattctattg gaaacaaaac 240
aaaacaaaac aaaacaaaaa caaaaccaa ccagacctca agtcaacaaa tctattggga 300
tattgtttac gaacaaagtc caccttaagc attggctcctc aaaacagagc tcttcaaaat 360
attagtgct gngctcatta cagaatcaaa ctgacacact gattgaaaac ttcctcaatg 420
aaattttcaa tcaacaacat gctnnaaata aaagnnaann g 461

<210> 8725

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8725

gntttctatt aatcatttac ttgtctcagc agatattgcc acacagatat agagactaac 60
acgggtctaa gcatatagac aactgttaaa aagaaataac atgtcataca gtttgtgaca 120
ctccacagac gtttttgtac tttgatgaag aatgtggata ctacaaaaga aaatcagggt 180
ttaacaaaac tcttacagaa atgacatatc caatatattc atatatatat acacacgcat 240
tgtgtgtgac aggttgggat gtgtgtgagt atatatgaat atattggtgt atatatatat 300

ttacctttat ttatgcatgg gatacaacaa tacacctttt ttttcttcat atgaaccacc 360
ctcccactgc ccattagggtg ctagtccagta ctatttaaaa tacagaaatc ctgttcatta 420
aaatatctta attaaaatag acatttcttc ccttagaaaa agaattaaaa ccttttaggg 480
cctagcttta aaagcaacat gctacagctg attnatittg gtagtggttt tatggatgtg 540
aaaatattac cactgaactg caggaactnt aattgg 576

<210> 8726

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8726

acttcacaca ttttgattta ttgaatacca ctgggataat acaaatttaa taattggaac 60
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ttttttttta cattttatta ataccaaagt gaaaaatggc ctgtgcttat actacaagga 180
tctcatatga atgcagtcct gattgttcga cacagcaaga aaattcactt tcacagtcaa 240
caagtcactt tactcagtag aacacaaagt aaatggttta taactccaat atttgcaagg 300
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ctacatcaat cgcagcagta acctgaaatt tgaaactttt aataaaaagt tcttaaatat 420
aaattatatg gcaaagtca gtacattgct tttttcagtc tctttttcag tgttttgcag 480
tagaacangg ttcctaccct tnaccttcct taggttttaa aaacccaaac cacaantctg 540
tggggagtcc tttncttat gng 576

<210> 8727

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8727

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aagtgggtcc tgggtcaggc cgccttcttc accaagacct tctgctcctt tctcctccg 120
cttctgtctg ctgcgtggt ggccgtccgt aacacatccc acctgctggc cattcacctg 180
tggtgtgtg ccatcttcct gccgtctgac agcgggcagc tgtgcctggc cctccctcct 240
gtacatgggg ctcccaggct gtctctgtgt ctgccccctc tgcagggcgc tggcagctgt 300
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cttttctctc ttctcagagg ggctccgggg gggctcactg cctctggcaa ctggtgtgga 480
agggacacaa ggtcctcgtt gacctgagga ncgccgtcna natggangan cacttccggg 540
gtttgaacgt nccttggggc tttggggg 568

<210> 8728

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8728

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gttttccata gttttaagca ggactttgng gtttttagtga anaagtcatg gngcaattga 120
aatcactgta agaaataagn gacttttaaa acaaacacag acacacacac tcctnttaag 180
agtaatatat acncaacaca gcagctacat ggggtgttcag gcaaagggtg catgaacgan 240
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gacattggag cctagacatg tgggaaagg ctcagttcag tacattctac tgcatacact 420
tgaaatatta cagtngttt ttctccaga ctattataaa taatttttcg ngctttctga 480
aaaaaataaa actgaacttt tagtctgcga taaaggngac cctntttta agcaagntac 540
tacatttgca ggatttgggg gga 563

<210> 8729

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8729

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cttttgatta ttgaagtgca tttaatatg tgagaggtct ttgaaaaccc catcttgagc   60
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tgtcaaatac atagtgaata tatctataga tctcctcagc cttctgatga gttacttggt  180
catacatgga gatttcttga agtgagctgt tagccatcct tttcacagat gaaaactggg  240
gacacatatt taatgcagtt atataactta tattgggaat acttaaataa aactggagtg  300
cctcactttt attactattc accactgttg gaacatgaat accaacattc tttctttggt  360
ccactaaaga cagttccttt agcaaactctg cggtttcttc ttggcaggaa ctgaaaagaa  420
ttcggattcc agcgccaatt aaggtagtca gcaggctgtc atagctcttt gtctcctaaa  480
catccttgat gtgtctctg ttttctctg tcttttccc aatcacacat attctttcaa  540
acttactctg cangtgccgg aactgntcaa tggan                                575

```

<210> 8730

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8730

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gtgggcactg catcacttta tttctttggt tttcaaactg tactctcgaa caaggcaaata  60
tcagtctccc acctgcctgg ccgctttgtg atctctcact gaagatgggc ctccagctcc  120
gagaaggcgc tcagcagaaa ggtggaatcc ccaactgaca gccaggctgg ccgaggactg  180
cagggtccca gcagggtgat caagcaccca caagcagaga ctctgggcca taatctgcaa  240
acagagcctg catctcccag ccttgcccca cctgggtccca cactccttgc aggggacagg  300
ccagcccctc agtgatctcc agtgccctcaa gatctccggg gcctcagtgc catcctttag  360
aggccagctg tggttctttc tatacatccc tgctgctgct cctgctgacc tggcaccttc  420

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tcccttgggg atgccaggca caagctgctg atcagctcta catttgattt tctttctttt 480
 tttttttcta agagatgagg nctcactaca ttgcccaagg tggtctaac tcctaacctc 540
 aagtgatcct nctggcttgg nctnccaacg ctaggatac 579

<210> 8731

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8731

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 ttcaggtcag ccaaaaaacg tgaagggaat gtggacttta tacaacttag acatttatgt 180
 agatagcaca gcagactcat gttcaagcca gccacctgaa acattataag tccgtcgagg 240
 gggacagcaa tctatgggtc atggactgaa tccagcctac ttttgtatgg ctctgagcta 300
 agaatcggtt taatatTTTT taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360
 ctctattctt gttctcatgt gtgaaccata tattatagcc tgcaaagtct aaaatactta 420
 taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480
 attctggcag tacaactgca agtctaagat aatgntcatt cattcccatc ataaatgtaa 540
 cattctaaat angngncttc tgatgtcatc tgnkanaatt 580

<210> 8732

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8732

gaaatacaaa ggacttttat tactgcacag tcactttaca aattgttaaa gcaggatgtc 60
 tgtttttaaaa attgaaagcc ttacttataa ggagagcttg cctatatgat actactttca 120

gtgttaccaa aaggcttatg agcctaaatc taccctcata ttaatgggca cacttttaggc 180
 actttttcca agaagtgcaa acctgttcct tggaaaagat aaccactaa tccattagtt 240
 ttttcgcttt gaaaaagcag agagctgatg gaaaggcctt aattggagaa agcaatccag 300
 ggctgctggg tggaggctgg agaatcccag gtggaaggct gggcatgagc catacactag 360
 gtgtctcaac tggtaggtc aatcaagtgg gagaacagac caaaaaaact tgaggacgcc 420
 ctaaagagat aatctgcctc ctattgcctt cagctgcctt tctgaggatg ttcttaaate 480
 acctatgtag gttagacca ggaagctta aaggagacaa ctggaggaag anggtatcaa 540
 taatttanaa gtaggctggg catggtggct cacc 575

<210> 8733

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8733

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 tgaagttttg aggttcgtga gatttcattt tttcttgaat ggtcacttaa agtccaactt 120
 gacaatgaac tgctctgaaa acgtaatatg atatataatt gcagaagcag gtagagtata 180
 aagatgatga ctagatgggt tctgaagaaa tcaagagaat ggtaagaaag tgagagtgac 240
 agctttaagg agatatatac tacatgtgac taaaataagc ttaaatgata ctctctactc 300
 acagagtgcc ttttgaattt ttaccagaat tcattcatta attttaactt aataagacac 360
 agcaagagca gtattagggt taaattacct ttaaaaattt ggctgcagac attaatgat 420
 tacaaaacac tatgatcatc ttctgaaggt attctacaca tcttaatatg gctactgaca 480
 tcctagcaaa tgncaaagtg cagataacna gctnacttaa aactaactnt nnaacng 537

<210> 8734

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8734

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actttcatta gtgctcattt attatttatg tagaaaagtt taaaatgctc ccaatgagtt 60
catcagttat caagctcaca tgagttaggc ccactctcct ttggtttttc atctcataat 120
aagtcagcaa aagttgacat ttatcttact agacatttcc cattagccct aactgaaaca 180
gatatcaaac accctagatt ctcttcagtg caaagtatct ggagtcacag caattttaga 240
gacaagctag tgcaatctag taattttcat agtcgcagaa aactgaggcc tanaagtgat 300
ttgtacatgt gagcagctag aaccaggaca agaactccag aacctgggac cacgtgagag 360
taaaaagaaa gggcaccgag tacaggaaca acaactgaca catttcaggt ggaaaaaaca 420
agtcacataa ctgaaaacca aaatcacagt tacataacta ttttatatta gcttcctaca 480
tataaagtat aaaaactcag ctatacatgg tatgaaattg tacaaactta cacttggtta 540
tgcctaaaat tgnataaggc ccncttatch gn 572
```

<210> 8735

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8735

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agaaaacatc actgaaaaag aagggtgtcg ggaggtacac cctgattctg accagcccag 120
cccacacaga gggctctgaaa ggttctcagc ctctccatc acccaccctg cggcctctga 180
aaagaggggc ccctctcaga cacaaaagca gatactccca accttatggg gaaagctaac 240
ggaggaatac tcacagcacc gtggcacggg acggcccttg gcttcagagc cgggctggca 300
ccgtttgtaa acattagacc tggatgatgtc tgggatgga ggaggagagg gatgcccagc 360
ctggaccatc aggtttgatg aaagagacag ggtggggccc ctcaaggcct gggaaatgtc 420
tattagctat gggaaagagg ctgacaggtt catggtgggg gttgcccagg aagggtgtga 480
caaggctctg atctacctga ctatgtattt gcacgacttc agtgctacct ttggaagtgg 540
ccaggcttct gaggaactcc actggcctgg ggtaatgaac n 581
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<210> 8736

<211> 574

<212> DNA

<213> Homo sapiens

<400> 8736

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agttgataaa aactttatTT aaaacatgta aagaatcata tagttcaaaa ctgcaaaaat   60
aaaagacaat ttcttgtaac ttaaaaataa agtatatatc tagaaaccac cacattaaca  120
tctactatTT atagtacaat ctccaattca aagctaattct ttgtatttct gtattttgca  180
acttttgagc tagaatcttc ctccctatcc aactatactg ttatgtaacc ccattgtttt  240
aacatttaac aatacaactt gggtattctc tgacaagcaa gaatatatac tattgatcac  300
ttctatacac aaaataaaaa cagttcaaT gactagaaac taattttaca aaagaaaaaa  360
aaacagggtta gtaaaacatt tcttttgaaa acaatgggtg aattagtatt ctgaattgag  420
ctagagcaca tttttgcttg aagactctcc atattaggca ctatgcattt atatagtcag  480
aacatttgca aaatgctttt cccggttatt aggactcaca acacctgggc gctgggggaa  540
tagccggact acctcagntt acacagggag aacc                                574

```

<210> 8737

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8737

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gagacagggt ctcattctgt cgcccaggct ggagtgtggt ggcacaattct tggctcactg   60
cctggacctt ccaggctcag gagattctcc caectcagcc tcctgagtag ctggaactac  120
aggcatgtgc caccacacca ggctaatttt tttttagtag ctggggtttc cccatgttgc  180
ccagattgga cttgaattcc tgggttcaag caatctgctg agccaaagtg ttgggattat  240
gggtgtgagc caccacaccc agcctttttt aatttataaa atagagacag ggtcctgctc  300

```

tgtaaccag gctggagtgc agtggcaca tcttggtca ctgcagcctc gacctcttgg 360
gttcaagcaa tcctcccacc tcagcctccc aagtagctgg gactacaggg gtgtgccact 420
atgcttggct aatTTTTTTT gncgttggtg cTTTTTTTgt agagatgaag tctcggccag 480
gctagtctaa gaactcccag gcacaagtga atgctcctgc ctangccttc taaatgttgg 540
gaataatggc ntgagccant tgggccatct gct 573

<210> 8738

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8738

ggaaggccat atccttttatt aaaatcgcca caaatacaaa agcatcactg aactaaaaat 60
acatcatata cgtatattct catattctta gaaacttate acaggtttat tggctttcca 120
tcttatcaca tgtcataatc cgaaaacatt aaatagaaac aaaagtctcc atgcaatttt 180
cagatgaaaa acattctgtg cattttcaac ttgtgtgttt tcgttttagat ggttgaaagg 240
gtttgctaac aactgtttcc caatttaggc tttctggcca tgggagtgac atgtcctgtg 300
tcatgtagaa ttgatagct tgtaatgtcc atttaaattt caagtgtatc ttgccttctc 360
ttagcaaga gccagcctgc ggatattgga tatacaacca gctgcagctt cctggagatc 420
ctggtcaggg gacccaacca tatccagtag aagctttact gccattctc atgcatgggn 480
gatgcagtta tcggcgcttc tggaaagtgg tacaaggcct gactgtcgcc cgatgccent 540
tggggcattg gattcagata ccnctagtg g 571

<210> 8739

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8739

actgaaagaa aaacaatttc ttttaatttg gtttgttggt cccacacccc atctatcaat 60
 gtatgtgcta tttaaaaata agttctatac agtatitttg cagtaccttt gataattcct 120
 agacctctat tttcattctg tgtattaatg tgaataacag atggatattt taatatttaa 180
 ggagatgggt aaactttcct ataggtcttg tgagacttcg tcttataggc tgaacaccat 240
 tcacaaaatg taataatgct tcattccttc aggttgaggt aaagaacttg agcaactgga 300
 ttagcaaagc tgcaaagaat gaaatgtggc ctaagatgta attatgttct ctgcccttcc 360
 tttgggccag ggtagttttg cacttgacac aatggaaaat aggccataaa gcctgaaaat 420
 aaaaatgttct aaaccccaat ctcacagcac tttagtaggc tttcactag gcacttttaa 480
 agtatittca acaaaaatact aattaagcta ccacttcaaa agagcttcaa ggaaaagctc 540
 tgctttctta taaaatcttt tgagacagag tttccn 576

<210> 8740

<211> 378

<212> DNA

<213> Homo sapiens

<400> 8740

ggtacacgtt acctcattta ttctcacaac atgcctgtga ggtagggagg ggcagggact 60
 gtccccgttt tacagaggag gaagttgagg cacacagagg tcaagtgact tgcccaaggt 120
 cacagacggc ggccaagctg gaaatgggcc ccggagcaga cccttggttc acctggggac 180
 gggggggggg tccccctgc agcaagcgcc agccaagagg atgtctcgga tgccanagag 240
 gcgcatacac agnatanagc atcccccat gtactgagct ggcttcgggg ctgacccttg 300
 ccctccccta ccccgncctg caggccccgg ccattgcagt tcanggctcg tgacaccctg 360
 ngagtngat gcngnggc 378

<210> 8741

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8741

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gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
aaagtagcaa atttgctggt gccaaaattt atttagcctg tttcactggg acaaactcac 120
gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttactccgct 180
tctaaaacct gatgaggaat tcaaaataag cacacggcat taaatgacat ttattgttcc 240
ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420
tttcaaatcg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccttta 480
tgaataaaac ataaaatgtc aaagctttta ctactggaa gtaagtttgn cttctnggga 540
gagattcaaa actcaaaatt actcatttnc tatttttggc cg 582

```

<210> 8742

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8742

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gaaagggaaa aaaaatttat taggtccagg aatcaaagat gacttgatag aattatgaat 60
acatgcagaa ttggatgggt agaaatgaaa tcaatctatt taggtccagc ctaaggttct 120
gatagccaat cagtagacac aatcagagta gtagtattcc taagaaacca ggataaatct 180
ccaatgtgca tgagtttaat gaaccagata gattattgta tcgccaatat ccacccttat 240
cccattctca gtcagatgaa ttttcttgct catgagggtc acattgaaaa cagcatgctc 300
agaaatgggg gtcttctcgg tgtactcctt tcccaggaca gggactcgtc gaggccccaa 360
cagtggatca tcaaattctca tcagtttcac ttiggaagagg tctttaattc ctcgattcat 420
tttcattaaa cgcctgatta tggaatcaca gttatctcct tgcctgattt caattttggt 480
tgagaagtgg ccattgggat ggctggggat tccngagaa accgncacac caggtctatt 540
cttaaaacct taagnggggt ncaggacagc ng 572

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<210> 8743

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8743

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gaattcaagg gtatacttta ttacatgat ataatggta atcatgtgtt tccataaaat   60
gcttctcttc cactgttctt tgaacaaaca ttaaattcat ttccctgac aggggtagac  120
aggtgtcata atccctatit ccaacaggga atacagaagc aagggagttt tcaacactgt  180
actaaaggag tgtgcacagg gcagaagcag ctggaactcg gtgatgcttc taactcctag  240
gccagcacat ctgcaccagg aaagaggagc aggagtcctt ctcgtctctt acttccaggt  300
cccggaggag ccacgtttta ctaaagccag tccctttgct gcactttttc accagcaact  360
tcagcaaate ggtctgaagg aaagtagcac ggatctcctc aaaaccgtga gccttttagtg  420
ttttatacaa tcctttcagg gccagggaca ggaccaagt tgcttctact gcctcgggac  480
aatggctgcc atgctgcttt tgcanaaagt gactggcgat aaaggcaant gctgggaaga  540
ctggcttaac tggggcccan agtcancaca c                                     571

```

<210> 8744

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8744

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aaaaaaaaacc atgaatcatt tattctttgg ttgtctacac agacacttaa gtactgtatc   60
gctgttatgc agcggcctgt ggaggcccct ggggggtggct gggcctgtgt cctgagccct  120
cagccagatc caggggggtgc ggtgtctggt catgtccact ccaagagcag tagcaccatg  180
tagaaggctg tgagcagggt cccctcggct gactggcaga tgtaggctca ctgctctgca  240
gccccgaggg gctggccagc tcagagtga gaagagttcc tctccatggg tctagtcacc  300

```

catccgtctg acctggacgc tgcatagct catccttggg cttcgattca ctgcctgaga 360
 gagactcttg tgcaggttcg ggggggccct gctgggcatc caggggctgc tcctgggaga 420
 ggtccatctc ttctgggctg aagagcatct tcaccaggtc atctgcctgc accctgtccc 480
 gctcgctgtg tcgagggtcc anggtgaacc acagggcgat ggcacaacgc tgcccctggt 540
 gacagcctta cttcatgngg gtttcagt 569

<210> 8745

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8745

gagaggaatg aagcgactgc ctttattgca tagaccttt caattgcttt ttanattggg 60
 gacggaggac gcgcatgaga cgaacagggg atatgaattt ccccgcccc acccgcgggg 120
 agaggaacat tagtgcaa at cctagcgccg gccccgggga acctgcccct cctgggctga 180
 ttggccagct aaatgggggc accggagtgg atggggcgag gctgcgggcc ctgaccggcc 240
 gactactga ggcctacccc agccagtaca ttccagggtc tgtcattggg cgacgcgtaa 300
 aatagactcc gccctcagcc atcctggccg ggtaggagca ggtggcaagc gtcaggactg 360
 agccctgccc cgtaaggcg gccccagatc agacgccagg ccccgccctc attgatcagg 420
 cactaccctc gggacgagcc ctttctctt taaccgtgac gacgccacc ttcagcatca 480
 cgtctggtcc catgaaacga gcgcaatcct ganacggggc canggccctt ggcaccacaa 540
 ctttacagcc aggccacacc cct 563

<210> 8746

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8746

acacttacta agaaaaacaa aaatttactt caaattgtag tataggcttt tcaatcacaa 60
 aaagaaagaa aagaacagtg atctgacagt ggtcacatcc tgtgcaaaaa acttgataca 120
 aaaatgatag cacatggtat ctgagctgct tacattacaa gaaaaaggaa atacagtagc 180
 tgaaatatgg cactcctggg aatcaacttc taaaccaa atagaatgcctt tgaaatgatt 240
 aaatttattt gtgtattagt aagaaagccc caccaccata aatagtacaa tatttaaaaa 300
 taaaaaaaaa tacatctatc taagatagat agtgtatttg tactgttaga cttctttaag 360
 tgcagaaggt gggttcaggtt ttgccttttt aattaaataa ctgaccatat gctttataaa 420
 gtttcactca atcacaaaag ccaattttaa tcaaggaata tgatatcaaa gttgcataat 480
 ttcatttggg actggcagca ggtaaagtc ttaagcttta acattaatgg tcattttagg 540
 caatggaata gttaaaaagt ctcaaatttc atatac 575

<210> 8747

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8747

aaaattgcaa tgaaaaaaat tttaaatect taccaaaaca gagaaagaaa aaacaaaatg 60
 cttaccaagc ccacaatata gctttcaaga tatttagatt aaactctaac ctattgtatc 120
 ttaagcacat aataaggcac ataataagaa attaagtaaa tacacagtaa ttctgagtaa 180
 gtattagaga ttatagnggt acaaaaaacc cttgagatta atttttttct aaaagaagac 240
 cttaccaaaa ataactttta aaaaatctgt caaacatat gatagacctg aatattttcc 300
 ttaagactgt aaactttttt tctgaaaaca attataaaaa agtagtttat aagtaggatt 360
 atttttcttt aaaattttcc aagatcatat tacttgacaa ataagtgtca ttttgaaatt 420
 taaaacatga ttttttctta ataaaattat tagttattct gacatcttat taacagatct 480
 tagttgaatt ccacttaatt ccctggggaa gctgagacac tgnattttcc aatagtcctta 540
 aaaggtaaag acnggctttt ttaangg 567

<210> 8748

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8748

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gtgttccaat aaaattttat taacaaaata tgacagtggg ggggccacag tttgccaaac   60
tttgccttgg gttttgttct ctccacagac tgagatccag tgcccgtgga aaagatgtcc  120
ccagaatcaa aaaggtcagc ctcccctctg gaatgacca gagactttgc aaaggggctt  180
ctgtccactc caggcacagg accaccttcc caaggtgcag cggcagctgc cagggcctcc  240
tcagtgtgtt cttctccact ggctgctctg agctgtggcc gatggccatt tggggaaatg  300
gcgccatcag cccactgtgc aatgggtcct ctggggacgc tcatgtcctc agtctcgctg  360
gactcctgag cagccagccg cctagctgca cgggtctgag gtctacgctt ccctctcctc  420
ttgacacggc tcttgtttgc actgtgtaag gtgtctgcct gagctggaag atcaaaacta  480
caccggcctt cccactcccg ggaaggacag gcacactttt cagaccgtgg cttctctctg  540
gtcaagatga aggaaaagcc aattttggcn aaacaggctt tn                        582
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<210> 8749

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8749

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gagatagggt cttgctctat caccaggtt ggagtgcagc ggtacgatct ttgctcacca   60
ctacctccgc ctcttgggtt caagcaattc tctgcctca gcctcccag tagctaggat  120
tacagggtgt cgccaccatg cccggctagt ttttgcatth ttagtagaga cagggtttca  180
ccagggttggc caggctggtc ttgaactcct gacctcaagt gatctgcctg cctgggcttc  240
ccaaagtgtt gggattacag gcctgagcca ccaagcctgg ccaccttttg gcttttttga  300
cagaactctt tcaattgtaa gtcagaaaac caacacaaac aggcttaac aaaataacaa  360
caggaatctg tctcacataa ttgagacatc taaacagtgt tactagatct ttgattctct  420
```

tggctgnttc ctttgggtgct tcattcttgc tggctttctc taagtagtag gaaaagatgg 480
 caccgggaag tcccatgatt atgtgaccct tacagnttca gatcaaaaca gaaagccttt 540
 ctggaaccct tganaacaan g 561

<210> 8750

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8750

gagacagagt ttcactcttg ttgccaggc tggagtgcag tggcacaatc tcggctcact 60
 gcaacctccg cctcctgggt tcaaccaatt ctctgcccc agcctcctga gtagctggga 120
 ttacaggcat gtgccaccac gccagctaa ttttgtatit ttagtagaga tggggtttct 180
 ccatgtttgt caggctgggt ttttaactcct gacctcaggt gatccgcctg ccttggcctc 240
 ccaagtgtcg ggattacagg cgtgagccac catgcccggc tgcaatcacg tatgagtttt 300
 tctaaaaaaaa ccgaaacact ggaaacatgg atgcatctta aagactttat gctaagtga 360
 accagtcaca aaaggacaaa tactgaatga ttccacttac atgagaaata tgagtagnga 420
 agttgatgat ngagacaaaa ngnttggctg ttgctagggg aagggnaggt ggggagttat 480
 tgtnaatggg cn 492

<210> 8751

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8751

gtaaaaaact ggctttatit gtcacttatt caccttatct cagttatgcc attttggcgt 60
 ccacagtac agtcccctgg aagctgggggt cagccccac ccaccaccg tgaccatcac 120
 ccacagggcg tgagtgtggg ccttgcaggg cccagccgat gggtacaggc tgcaggcggg 180

actatggggc tcctcctgag gcctgggtgcc ttccagcccc ctgcccacca gcttgggtac 240
 agctgcctgc ctgccagagg ccaagcattc ccaagcgtgg gctgggggag gccctgcccc 300
 tctgtagcag cagagcagac agggcagtgg gagaaccatg tgggtaggag ggcatcaggt 360
 ctcaagagcc tctccccctgc tcaggactgg gtctagacaa ggccacgtgt gatagggtgg 420
 taagccctgg gccatatgga ggagcctggg gcccatcttg ggtcttgctt gctganttgc 480
 tgggtggctt taggcaantc cnttttgtcc ttgggcactc tggttcctgn ttagcacttg 540
 cancaaggct caaaatgtgc cctnt 565

<210> 8752

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8752

gtttgaaaag tatataacag atttctttat tattatttac aatcaagttc tgttggccaa 60
 cataatgaaa taaataaaaag atgtgccctg gcctgtgaat ttcaactctc cttgacttaa 120
 gttctctgaa gggcaaattg gaaagcgggtg atcaggcagg gaagagaggg caggtggagg 180
 ccaggacat cggtgggaag gccacctgac tcctctctca ccagctctaa cactcacatc 240
 cccaaatgtc cagagaacaa gcatggaaga aaaaaataa agtgcaaatt taaaagtgat 300
 aaaaagggtg tttcgcacac ccaatgaact aaaactttat acgtaggtaa aatagtaaag 360
 ataaatgttt ttccttggcc ttcatacaca cccctgaaac ggaaagatgg cgctgctgtg 420
 cttctgagcc taggtttctt gactaaagc accaagggca tcgcacacag gcttggcaga 480
 agggccatgg ncagaatcac caccttcaga caagattggt gaggctcgaa tccttggcac 540
 ccccaacttc agtngcnc ac 562

<210> 8753

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8753

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ccaggtgtgg atttttatTT tcacaaaaag acaacaatgt cttccccaca tacaagtatt 60
tacaaaaccc aactgattca cccatctana acctggggtt tttccactt ctcaacatag 120
ttgggaacat ggaaacatta ataccacac aattcccaga gatggaattt atccatcaaa 180
caaacagngc anattaccta aaagtgcact tacctgcaca actcgggtcta agaaccttgt 240
gaaacaaacc tcatggccaa ggtttcatga atctatttgg tttcatacca tgcaaacctg 300
aacaagtgtg ctgctacact aaactgaaaa tcggttctca ttttacaatt aaaaagggtc 360
tcaacacttt agcaactata cagaatatga aggtttatTT caaaaaagat tacatTTTT 420
taaaccagga tacacagatg cacttaatgt aacagtacct tctgcaaaaa tagggtacat 480
aatactcaga aatgcatgga ccaatcttat tctctaaaaa ttgaccgctt aanacttctt 540
aagngtanac agccttcaaa 560
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<210> 8754

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8754

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gcagaagggt aggtgtttat ttgcactgct tttataccgt ctaccagggt aaaaaaaaaa 60
aacagagact cttttgaagg catagatTTT agatatcaac ctgagactgt ggcatttggg 120
atttccagag catgtcgttg aggcactTTT gtaccagag gcacatggaa tttaccaggc 180
tgtggagatg atgtgctctc gggatgctgc tgccagtagc ctggtgaggt agggaagaca 240
gcagtggacg cacagtcagg gccagtaga cagcccgctt gcctttcgtg tgattgtcca 300
gcaggtggca cctgttccct cctgccaccc acctataat tgcttccctc ttgagcacct 360
tcagccagag gtgggtggga aggggaagga cgtgcactgg gttctgctat gtgccagcat 420
ctttggtata aggagccatt ccctgcccان ggcangcagc cagtaccac cggggnttgg 480
gaacattgnn ggggctccat tggcccatgc ttntcctgct tntattagta gggaatcgan 540
gg 542
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<210> 8755

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8755

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agaggtgtca tgtttacttt ttatttagga gtacaaactg agacaaaatc atccttccag   60
ttagtgaggt tttagaggat catactaaag agaagacagg aaaacaccag taatgggtgaa  120
ggtcttgaga aaaggacagg acccgagat agcgagagat cagaggaggc cctaatttct  180
ttcctcattt cctttccaaa tatcccaaat gtgcaatgca tcacctgaga cagaaggcag  240
aaagcatcaa gctctctgtt tatcccaatt caatgacaac cagaacttat tttttttgag  300
atgggggtctc gttctgtcgc ccaggctgga gtgcagtggg gcattcatgg ctcatcgcag  360
cctccaactc tcagtctcaa gcaaccctcc tacgtcagtg tcctgagtag ctggaactac  420
aggcatgcac caccacactt gggtcatttt taaaaaattt cttgtagaga caggatcttg  480
ctacattgcc caggcttgag tgccgtggtg cattcacagc tcaccgaagc tcaaactctt  540
gggctcaagc gaaccttctg cttaagc                                     567

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<210> 8756

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8756

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caatgctgaa aggaactttt aatatcttaa cttgacccaa attatattat tatttataaa   60
agttatataa atgcaggctg attgttttaa aagagtcaaa aagccaaata taagtaaagc  120
actagaaata aattcagttg taaaaaattg acatcattat tctaaatgtt atgtggaatc  180
acaggaagaa acatcattgc aatcattatt caaagtaata tttaaagataa cataagagat  240
gtttggtctt aaatgtcaat ttgaatgtat agtgtctaca ataatagatc aaagagaaag  300

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taagtatatac tgtaataaaa acaagaaaaa atgagttgca aatactgtat tctacaatga 360
aagaagaatg cagattaagg ataaaacagt cttaccaact aggccccctt aaggatcatt 420
tttcagggtg gctaaaagga gtaacaataa agctctacac atataactaa aatgttgcaa 480
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<210> 8757

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8757

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ccgtaggggg gcccggcccc acccccggcc aaccaccccc ctcggaacg ctgcatcagc 180
ttcaccatga ttcccagtggt tgctgggctg gcagggcgag atggctggaa acacagaggg 240
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gancaggtga ggaccatctc gactaatcct ttttcttgct ctctgctgct tttgnagggg 480
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gcctcctcct tgggtggcngg gg 562

<210> 8758

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8758

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<210> 8759

<211> 636

<212> DNA

<213> Homo sapiens

<400> 8759

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 aaatgtgcgc ggaacccta tttgtttatt tttctaaata cattcaaata tgtatccgct 240
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<210> 8760

<211> 610

<212> DNA

<213> Homo sapiens

<400> 8760

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gagacagagt ctcactctnt caccaaggct ggagtgcagt ggtgtgatct cagctcgctg   60
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tacaggcagg tgccaccatg cctggctaata ttttgtttta gtagagatgg ggtttcacca   180
tgttgccag ggtggtctca aactccagt atccacccac ctcagcctcc caaagtgctg   240
agattacagg catgagccac cagcctggc cccaaactga ctcttgacca aagaatctga   300
tttgcaaac caaatcttag tgcagtgttc gctcctcgtc cccttaccca gaacatgatt   360
cagatcctaa cataaacaca aaaacaggtc agggaaacaa aacactgtgg tcttgctatt   420
atacaaaata ttgagataat gttcacgatt cattctgntt tcagcaattg ngacaatttt   480
gaacttctct cgaacttcga aacacttcat ttcctactaa atcccaaacg tgtaaacang   540
cttcaccagt gggacttggg ttgggttggg ttttttgana aggaatctcg ctntgtaccc   600
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<210> 8761

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8761

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ttcattatca gaggcacag attcacttcc actgtcgtca gaactgntac cagtaaggcc   180
acctactttt cgtgcttttt tggttctcg agttatttct tcacctttcc gcttctttat   240
tttattttct ttacaaggac tatctcttgg cgaactgttg ttacttggag ctgtcaaadc   300
gattcctagt aaactataaa gttttttcct gtctggagca ggaaaatgtt tttcaatgag   360

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tgactgcaac acacctttgg cagttgaaac aaaatcattc aattctcccc cgccctcttc 420
caaagcttct aangntctag ctntccngn anactgn 457

<210> 8762

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8762

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tgtaccaaac ttctataga aagataaaac attttccaac cttgcttttg agtatttcct 180
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cccctattat tgaggccctg atgcaccct gcactgagga acctgagaag ggtaagtact 420
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ttcttctcgn gctcacagga gtaacaaagg aactaggact aaaccttacc agaggcttcc 540
acgtggacta cagtccacac gttantttgn gggccttaca atgccctttt tgaccaatg 600
attactggaa aa 612

<210> 8763

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8763

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atcacaatag gaaaggtggt cagcttgtgg aattttcctt ttggtaacct taagaagtca 180
 ttttagcagt actaaccata cagtatatgt caggcactgt aataaactct ttacaagtgg 240
 tacttcattt agtcttcacg acactgaggt agatactatt aaatgtcccc attttacaag 300
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 aggatttaaa tctggaactc ctaggcaaaa aaaagtgttt taacaatcac aatatacagc 420
 tttacattag taaaattttg aatttggttt tgntcattgg tcactatgca tgttttaaaa 480
 tgtgagggtt atagcttatac tggtaggaca aactctttta cttctaattg atggctancc 540
 aacatatctt caaaaatact attataatat ncctaatttc aacaccaaac acctntccaa 600
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<210> 8764

<211> 616

<212> DNA

<213> Homo sapiens

<400> 8764

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 tcccaaagtg gaagctaaaa acaaagaaga atctccacac attttacatt cataagattt 300
 ttcacacttg tgagatcaca gctgaatatt aaggtataag gcagagcgaa aggtttcaac 360
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 cccgaggaaa ataatagaag cttttccacc ttcctcacat tcatagcatt tctctccagc 480
 atgagttcaa acagactcag taagatgtaa gcatcgacag gtttctaccg tcaagttggt 540
 tcctaggatg cncagacnca tgaatagtan ggctatggaa ggagcccaga tttnacatc 600
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<210> 8765

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8765

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ttcaggtcag ccaaaaaacg tgaaggaaa gtggacttta tacaacttag acatttatgt 180
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anaatcgttt taatatTTTT taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360
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taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480
attctggcag acaactgnaa gctaagataa tggtcattca ttncatcat aatgtacatc 540
tnaanagggg cttctgangc actgncnaat tcttttaact tttcttcat 589
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<210> 8766

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8766

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gggtaacaaa cactttaaac ttatttttta gacattcaat aagcccatc tcccacaaac 180
tgtttgatta caaagaagca caatgggtta actgtggcaa aacataagaa ataaggcagg 240
ggaggcagat acagacttga gaacataagg ataccacaaac aattttgtca atatcaaaag 300
acaaaatcaa aacatctttt ataataaaa acaaatccat ataattaaat actaattagg 360
tgaaagatta tagggtatat aacatttatt ttctctacat aaatttgcac atcttaaatt 420
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taatgcaaaa catcatgttt caacttcaac ttaacatcat aacatgtagt tcttggtgag 480
tctagatgta atggaatgaa tatttaaata gacttcaaag atcctgtcag gttttaattg 540
gtattggtgc ttaagnctta atgctttctt tattatggac taagccantt tagaaccaaa 600
tcncaccacn ccct 614

<210> 8767

<211> 611

<212> DNA

<213> Homo sapiens

<400> 8767

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aaacaatgta caaaagacag ataaaaacca tcaactctga cggatagtca caatccaaaa 120
atagtataaa ccttaacaaa ccctctctaa accagggtcat attcacatct ccccccaagt 180
tttgtcagtg agaataaaat atactgaact agtgagctca gtctttcttt aaaataggct 240
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ttctttaaca agcttcttat cctgagggtca ttccagtaga ttctgccata ttctcaaatt 480
caaatggcgt gattccagtt gcaaatttgc tcatgtcang tatagggcta tgaattttan 540
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gggncaactg c 611

<210> 8768

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8768

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 tctcaatgta aaggatcaga gatgccacat gttctccttg atgggagaga cccttccaca 180
 tgggaatgat gggaaggagt tgtactcctg gatgttcagt aactgcttct aggagaaaag 240
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 gaatcttctg ttacaacctt gggaacgtgg ctgttatttc aatttatgag ccagaaattt 360
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 cttgaacagg agtgaagact ggcggtctaaa gcccttcacg agaatgctca ctgggccggn 540
 tncacgctca tccagtggcc taggtctgac tgccagcgaa caaaactgtg cngagactag 600
 gattcattcn gcg 613

<210> 8769

<211> 618

<212> DNA

<213> Homo sapiens

<400> 8769

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 tcactacaaa aagaacccat cactgatgta agacctactc atgatactga agtagatttt 180
 tttaaattaaa aaataaaagt agtcatttaa aatggaggaa ttgtagatga gtatggaaaa 240
 atccattcac aaagttcact atttgcatth tctaaaagaa ttttatgtaa taaaatagaa 300
 aactaatgat ttatagagat gtgcataaac tcaagagagg aatatggaag ggaaaactgt 360
 gttatatccc catttaaat taaaaaaaaa aagataaaac acttgaaatc tgtgtttcac 420
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 tctaagatgc tgccaagata gcacacaact ttctcttgaa tatgcaccta acttcagggt 540
 aaaaagaccc cagtcctcac tcgggaccga acacgttncc agagaaatca gaaggaatta 600
 tgnaaancnt ancccntc 618

<210> 8770

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8770

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gtcatgaaaa aatttgatgt tgtttattgc aaatacaatt taaacaagtt ttttttagtg   60
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attcttatag ttacataatg tgaattcatc aaaatgcagt taagaaactt acaggaatat  180
atacacttga acccaagacc caaacctgac attatataca acctatttac aaatacatat  240
ggacagacaa tatatgtaca tagattatca taaatattga aaaataggtt agctttaatg  300
gattaatggt gttctataaa taacattaca gttgtaactg aaacatccac ggaagacagt  360
aatgcaaaat gaggtgacaa gacagtgggt ttaatactga agactgctca ttaatgggaa  420
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tttccttagg cacttgattt tgaaccttaa atagccngag gattggagga gcttcctcac  540
ttaattgctg tagagaaaag aaattttttt ccattcttct tgggtggcaca gtatntntnt  600
ccatcaaaaa aaaa                                     614

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<210> 8771

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8771

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gncctctttc tcaggaagag acagtaatga tttgtatata cggacaccaa aatctctttg   60
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ctctaattctg tagtccaata ggacactcaa agacatgatg ctacaatcaa acttgccact  180
tttgcagcc caatttggat gtacaatgat ggccggttca tcaggcaaaa tatatcttct  240

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ttctcgacgc tggcggttcta tttcctcttg acgtttcctt tcttcttctt ctttatcgtc 300
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 tggctttgga caagtttaga ccaatgggta ggtgtagaaa ttttttagct tcaccatcat 540
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<210> 8772

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8772

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 gctttcttca cacttngntt ttaaaactnt gggttcaaaa aaaactgnnc ntgggtgagan 480
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<210> 8773

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8773

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 gngcgagctt gggaccagct gctcaggaac tggttctgct tanngcgga tgcccaatgg 540
 gcagcttaaa gacttattgg naanttagaa tagaagtnt nccccngg 589

<210> 8774

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8774

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 aatgctccca agtagaaatg acaggactca aaatcccttt ctaaagccca acagctaact 180
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 ttgatattca gngacttttt gnagtttaga atatatatct gnagcatact ttaatcatcc 540
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 ccccttacc tta 613

<210> 8775

<211> 444

<212> DNA

<213> Homo sapiens

<400> 8775

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ggggccactc aggaacaagg ggagacagat gccaggcatg tatgcaacag agaaaatcca 120
gctgcacaga aaccctgtgg gagagcagct cagtccagcc tgaaggcgtc tttgggaacc 180
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ccatcctnan ncctgngctg accn 444
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<210> 8776

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8776

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gcacataaag caaattcatg atgtgaaaga ggcaaagac aatagttaa gtatgtctta 180
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actgatgagg aaacaggctc agatgggtct attgatgggt ccacttgcta gaagcaaac 360
tggaactaga aaccacgcc tggcttctag gcagcaagca atagttttgc taattttgtt 420
ccccagcatc aaaacaaatg cncaaaatgg gaaaagacaa atgggtattt agttgggtat 480
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tttataaacc ccatatttaa aacttaaant aagtncatgt aaagaactgg ccccaaccga 540
tgaaggg 547

<210> 8777

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8777

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cagaggagaa aacaacttcc agaagctgcc ccttcaaagg cctgaggtga ggacctgggg 180
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ctttgn 546

<210> 8778

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8778

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tctagtgttg gttcactgct gtgcagcaca cagcagtatc tgggtcaatg aggacatggt 180

cctagccttt ctttctccac caggaccctg acttatctgg ctggcccagc atggaggaga 240
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 tgtccacagt gggtagccaa ggtgactggc attttgatcc cagctgaatg aagactggat 360
 ttgaatgcag tgccagggt gttctgtaga caagagcgaa cagtaccctg ttcgctccct 420
 tctgcagtac cctgaggaag gagagaggca cccaaggcac gaatgcagac aacagangga 480
 ctggncangc tatcccgttt tncanctgtt tgtgccacaa gccaccactc catactttat 540
 gtc 543

<210> 8779

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8779

cattataaaa tgtcaaacat gaccagtggt gggtgtgatt agcaattaga gaaaccccat 60
 cctaggtaat aaaaagtgtt cccaaatagc acctatatgt ctttctgact gtggtttaat 120
 gagtaattaa gaccattcag ccaagattta catttgctgc cacctttaat agcactgatg 180
 aaaagtagaa cttttttttt tgacttcttt ttcactgtgc ctctaataca gaaatttttg 240
 ttaaaatatt aagggttttt aatgttttaa gaatgagaca taaaaaagtt gcagaaaata 300
 aatgataaat tcttatttat tgaaagacat tcagttgagg aatagggata taactgtttg 360
 ttaggtaagc ttatatggca catgattaag ttccactaat tcgtatttct gcattatgct 420
 ttctgataat tccggagcat tatactcatg cagcagtggt aggaaagtac tgatgttttt 480
 ttaaaaaatg gtccattctt ggccagccnc atgggttacg cctgtaattc cagcactttg 540
 ggaggc 546

<210> 8780

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8780

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ccatctttat cggctgtata aacatctctg gtctgtacat acatttcata catcgtaggg 60
tggaagcga gggccaaagg gaggcccagc agcacaacag ctcacccgnt ttcctacag 120
ccctacccgn tntgtgcaaa ccaaggccaa cagctcctgc tgcctcttcc tccctggaaa 180
agtcactgtt acggggaggg ggccaggggt tgaaggatta gaaggagata gagggcttgg 240
tggggaggac acatgtaagt gctagaatca aacactgaag cgaaacaggc aactggcaca 300
agcagcaagc tgaggcatgg gacggggcan gaaaagggga gggaggggcc acgctgcccc 360
tctgggcttg ctcagctaag gctctgggggt cttgccctac gctggcaggg aaacaggccc 420
cagagcctca cccaataacc cgggagctag ggacatgggt ggcactggta aanaaagggt 480
ggaaggggaa aaaggantna aggccctant ggccctgtna cttaaagccc n 531
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<210> 8781

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8781

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ctctatttaa tgttttattt tggaagaaag aattgcatgt tcagggcatc catgtagacc 60
agttggtcct cggtatgtcg gaacaacaca gagaaggctg gaggttttat caaaagaaat 120
gtcagtattg ctctttgaga aagtttattg gcaccaggaa ggggtgttggg agctggcaag 180
ctacaactgg tgagcaaccg ggcaggcaaa attattccta gagcttcagc aagttctctc 240
agcagttatg gacaaagctg gtcccagctt acagcacgca gtttcaccag ctggatgtgc 300
agagaattac attactagat taatgttatg tgcctgaggt gcttttatcc ctggcttctt 360
gacttttgat tgggtgtgat aagaatgact taatttggtg taatccactt tcacagcact 420
gacatactta agtatggact ganggttgct gaattaaccg gtgtgtaccc gancccaaga 480
aggcttaatg aantaggaat tactgnntaa gcctaagacc ttattataaa ttttgtcc 538
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<210> 8782

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8782

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aaaaaaaaagg ttggaaaaat tactttatga agccttaagc actaagaata attaattaaa   60
ctgtaatcca ggattagata caatttaata atagttcaat tccaaaataa aagttattgt   120
aggtagacc atgaaatttc ctaacgcttg attttaatac attgcgctaa ttttctaaaa   180
caactcagag gaacccatat ttacagtagg cagaatattt atgaaaaaaa tctggcatca   240
ggtatattta tatatatgta tgtgtgtgta tacgtatgtg tgtgtatata tatgtgtgtg   300
tgtgtgtgta tcccagagatt atatgaacta agaaacaagt tgtgtatctt aacagcagta   360
ctagagcgca gagtttcaga cttggattta taaatgcttt caacgtgtgg tgtttgaaa   420
aggagaagac atcatctgat tttcaaaacc tggaagtttt tctcangact ggaagtcaaa   480
atcgnactgc ccntanggg aaaagggaac cttttcnta atggtcatct nc               532

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<210> 8783

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8783

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aataatatga atttaaaata gccacaaaca gggtagagtgc atgtaagcgg ctgaactgcc   60
agtacagggg aaggtaaatg ggcctaaact atgataccta gcaagggttg gatctgtgca   120
ggcttctatg tacagagaca agcagggtta ggcacttaaa gctttttgat gaaaatcctg   180
ggaaagagct gaggctacat ttattattat tactatcaaa acaacaacat acttttcatg   240
aagaaacatg caatcagaaa cattacagag actgaagaga gcttaagagt tttctgaaaa   300
tgaaatgaca tgtttttcca gagtatcatc tcaattataa aatttgatgg ttttatatta   360
tcatatttct tcagtggtaa atacctcatt aaaaaattat taaaaaatta ttgacaatac   420
aaagccctag ttagtataca aatattacta tactgggtccc atcttgtaag ggaaatatcc   480

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catctagata tctaaatata ttctatcatc caatatctta aanccaattt cttaaattg 539

<210> 8784

<211> 479

<212> DNA

<213> Homo sapiens

<400> 8784

ctaaccagtg aggaaaatgc agaggggcag tgggttcatg agaaatgtta tcctttctac 60
atgtagagag aaagctggga ggatcttggt agtagagggg aaaaaacaat cacacagatg 120
aaaggataag catcagaaag gagcagtata gaaaagagat taaatatgca ctcttccata 180
caaattaggc atttagtaca ggttctggca tatgggccag ttctaattccc tgatgaggca 240
agggccttag acaaagagca ggtggagcta gccaaaggta ggaaaattcc agacaatgat 300
ttgagacttc agctgttcta tttcttcttt cttttattgc caaatactga aaggagacta 360
agcaaggaag ctggatatga aatgtctacc ttcttgactt acggttcatg ttgtggctct 420
tcctatttcc accttaaaat tgacagggcc tngctnaaat ttgngctncc aangatncc 479

<210> 8785

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8785

atatacagaa gctaattgtt attgaacgta acagtatatt tcatgtagtt tcccataatt 60
tttcatgta ctaactcatg taattctttg ttttttagag atctgaagtg attttacctt 120
tacttccttc actttaagcc aatcatgaaa tttcagtgat ttctgggggtg agggcgaaag 180
gtggtgttac gaatcatcgg ggctgtggcc cagttgcctc acggaggtgc aggtaggctg 240
gggcctcact agggcagctg gaggagcacg gactgccctg ccggcaggca ggtgatgttc 300
cgagagcatg agagctggta tgcaatgtct tctgcagctt ccagcttgca cagctcgtc 360

tggccgtccc ctgcagtggc cagtgagttg gcgatcagct cagctgcctt ggagtcaccc 420
tcagcagaga tgatggccgc cttttccacc acaaactctgg cgctctctgc ttcctggggg 480
gccacctgtc tggtaactnc tttcaagaan gncanatgtg tcaaaaacac gttgtccana 540
atgagcccca aaggg 555

<210> 8786

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8786

gcattgttaa aatgtttctc catggtgctt ttaatgaagt atatgcaact agtttaacag 60
catgacaatt gttattccaa gacatcctca gtaacttttg aaatagcaaa tttaaatttt 120
aacatgttct tatatttaac atgtttgata ttttcttcta gaatatcata gcaaataaat 180
attcaacata caccaaaagt acttaaaaga agctcctttc ctttggacat caacttttaa 240
aaacacgaac aactttttga aagacagaat ttacaaatac agaactgtac tgacttaaata 300
ttggaattta ctaattactg gggatacttt agtgagtctg catatgtgta ttattaatac 360
atgttaaacc atactgcaga taacaaaaaa tatacttaca tttctcttcc agagagtaata 420
gactgtattc aaagtctgag ggaatgacaa aacgggatgc acatctaaca ctgatcccng 480
ttcttcagaa aagactagtt tcagctggtt ccaggnttac ataagatgat ggaagcngtc 540
ttt 543

<210> 8787

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8787

cttcttttgt tctttttgcc tttgttggtc tttaactngt tctctctcaa tatccatgaa 60

aagtcgtcta tgtctcaggt actgcttttg acgctctttc ttatcttctt ctttatccac 120
 gtcanactga aatgccagng gagcttgga ttcagngctc aatcctgatt gatncctatc 180
 ataagccaat ggcactccag gagtatttcc tcttgcaatc tcccatttct caaaagatga 240
 gggtagtttg atatgcttgt tctgttctct aggggagctt tggctcctgga ttttaggtnc 300
 aacatattga tgatagtcca naggcaattc ctctctcact ctttcttctc tcataaaaga 360
 tgcaggttgc tgatttttga tgtcatcctg gtcctgggat ttgggaggca aacactgata 420
 gtctgccaga gaaaagcttc tctcccttcc tcatctgnca tatcagagta tggctcctta 480
 aagnnactt tctganattt tggtagaaaa tcttgggcct gacatttggg an 532

<210> 8788

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8788

ccaggagcag ttaggtacac acagtaaagt ttatttttgt gcatggtata cttcactcca 60
 ttaaaaataa attaatcagc aaattcctgc ctggctcagc tctggtttat gtaaatagtg 120
 cccagctgta atgagttaca aggtgttatt atctcacaca cacacaggag gcttcactct 180
 agagctccgc tcgcaacaaa agcatcttaa ataaactgag agaagcggtt tgatttgtaa 240
 tgttttcaca gaagtgggat atacctcacc catatagagt ttctttatat gactcatttt 300
 atagcaagtt aatgaagga agtttgatgg gggaggaggagg ggcaatatgg ttccccaccc 360
 cctttcttca ctttaagaaa atcccccaag agatgaccgc cactgaggga ggaggggctg 420
 gtcctcangt gctcagacca aggtggctct gcagcaccgt gcttcagaag ttgggaangg 480
 gggaccaaag cttgggcccc aggtcttggg ctggttacac taanccngga ngaatgttct 540
 tttntcccc ngn 553

<210> 8789

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8789

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ctctngatt tggttttcta ctttggtncat catganctgn ggctgcatct catacanaag 60
ctgacacatn tcgcaggaat gcccataaa acagagcgca aacaaatcac ccagcagggtt 120
cgcttcacct ggctgttact gctgaactcc ctactintaa nagnacagaa nanaacatcg 180
ctttgaatct acagataagc gaggggtggg cgagcagcag ccagggctgc cgggatggga 240
gcggccacag acacaggccc ccgggtgtct gtcttganat acaggtggan aagccgccc 300
agaaattcca gcaagatggg agcagctggg ggatgctcca gcacagtagc ctgcctacag 360
gactcctctg gctccctcag tcctggtaga ttctggcntg acaccaaggc cagcagtgtt 420
ggctcttggc cctgtcactg ngctgggtt atcctggggc cccaaaagcc ctttttttgg 480
gcagganctt cgncttccc ttttnataac ccccttggn cccaanaaaa ccccag 536

```

<210> 8790

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8790

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caactacaaa aaaaaaattt tttattaagt gtgaaagcaa aacaggtcca tctattttaa 60
tattttttac atatttatag atacaacaaa gacaaataac ttagcaaaaa ttacaagttt 120
aaagaatagt actattttga aacagccaat atagtatctg aaaatattcc attttatcca 180
taatcagtga gtattatttc caaaaaagt aacttgcatt ttcttgtgaa aaatatggtt 240
ttttttttag atgtctgcc aagatttatca gaaaagtcca tctttctaaa cctaaaaaat 300
tgtaatgcct ttattgagaa ctttttttac ctaatggctt taaaaccac gtgttttcct 360
ttggacttag gtgaattcta aatctttact tcactttcaa actacagggc atngacntaa 420
acaaaaacaa atcanatnga gagttttggg ttgcttttct tnatactng cgaan 475

```

<210> 8791

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8791

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ctactcaaac tataagcttt tattattgta ttttacagat cattcattca ggacatgctg   60
catctgggggt tggcatcatt tcccttttga atgacagaat gtgcataaaa gtctcttgcc  120
cacgctgaac tcacacgtgc ccggcaggaa ggagctctca cgaagtgcc a gctggatgtg  180
agcttgctct ggcagcagca gtgctgtcct tgtttctgag ctgccaccta ttcactggag  240
ttaggtgggt caaagctgaa atttagcttg gaatttaagt ttctaatttt atacttttca  300
ttnggtctg gtcagatfff agtctgcttc aaaatcaaaa ggtcactcag tcactctaata  360
atgatcattt tgaatatgga aatttggtat ttacatgctg tacctcaaat caaagaaaaa  420
gcacgcgtca atatcacgcg taggaaaaac tagaaaattg ttccttttcc atttgcccc  480
tggttangtt tcctcataac nggtcngctt ggaaaccaga ctcccccttt naacagatgc  540
cn                                                                    542
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<210> 8792

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8792

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caatctttac aattttattg taaatcatag tgtgagatac agctgcaaat ataggaagt   60
aagttcacia actgttattt tctaaagcta aagctaacat taggccttgc tatggtagaa  120
ctcttcactg ggttggttct taaaaaaaat tcacgcaact gacaggagga attgtcttta  180
ttcttgcatc aatgataaat gtaatctaca agatggcctt catggattag aaaaaggaat  240
cagaccacia ggaaaaagaa attgctggtt ttcactcaag atttatctag aaaagtgtac  300
tgactactgg aataatagtt taccctggg ttgtaccaca gaatgagaaa ttctacaaga  360
ttatacaact ctttttctac aagattacac tactcatatt gnttttattc cattccggaa  420
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ttagaaatta acttttctaaa tatcgnntttt tttctccaaa aaaatccttt taccagctaa 480
cctgggatat ggccaaaaat atcttgatnc tggnaaaggg ctatctccct agtaaaaaat 540
ggaataaatt gn 552

<210> 8793

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8793

aaaaccagaa tgaaatttta ttgtgtaaag tttatagaag tatgactagt attcctttgt 60
acaaagtaca caacggtttt aaatataact gagagaaatg tgagtcctat gacaacatct 120
gatacacgct gaaccattta cagacacact aaaaatgttt taaaatatct tctttctcca 180
aagagtccat tgcgcatttc ttagagtaga gatggggaca cattccaggc aaggtcacaa 240
tggcattttg ttgccctcaa tgctgatttt cactgcgtgt gcagatctgc tttttttcct 300
tatatctgtg aacttttctca tctgtttatc cagtcgactg atacccttct tggaggctgc 360
ctgaaacctg gatgactcca ttccacatt ccatttgggc ctgacaacat agtccttggt 420
tgaaggcatt gggacccttg cacgggcaca gaatccaagg atctccangt cttaaaaacc 480
ttcttccttt cttgtaacac cctttttcaa gggctnttct ggggggtctg accccccann 540
gctgttnatt t 551

<210> 8794

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8794

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aaagtaacaa atttgctggt gccaaaattt atttagcctg tttcactggg acaaactcac 120

gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgt 180
 tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
 agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
 aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420
 tttcaaatcg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccttta 480
 tgaataaaac ataaaatgtc aaaagctttt actcactgna gtagttggct ttttgggaga 540
 agatttcaac tcc 553

<210> 8795

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8795

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 caacgttaca aagaaactca ctagcaaata aacaaacgat attcacttga ctcttctctt 120
 ggttgaatga ttttctatta attagtagta cacagctatt tttatcaatt tatgcttaaa 180
 ctgccttatg atttcaatga aatttcttag cttttacttg ttgaataatt ttttcaattg 240
 ggaatctttt cataattcaa aatagttcct gaaaattaat gcaccttca atgtcttcta 300
 cttagctgg gtgcatttaa aatgcaacac aattctttga aaggagacta tgacatttga 360
 gcataaagcc tataagaaaa agaaatgtct tccctccccc catgcttcac agagactata 420
 tgaatgttcc atactcttca tatttagcaa caggagtcc ttagagatca aacagcagaa 480
 aacaggagga acttangcca tcaatggact tgtaaaacag ataaactcnn aatgnatttt 540
 aagattccat cttcttcaca gatgaa 566

<210> 8796

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8796

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gggggggtgca nagctgtgtc tggaaccacg gntagagcca cgggccgaac tgngcacaga   60
tgccttcctc ttcggntca tacttcgact ttggtcttct tcttcctcgt aacgactttc  120
tcggncgct tttcgggctt cttcctccag ttcacccaa tcctttccac tctcttcttc  180
actaccaat gactccttan aatagtctga ctcttctgct tctgatgaat aatcttcac  240
actggcctcc tcttcctctt catagtcac ttctgaagga ttaaaagtct catcttcaat  300
ttcagactct gaatccccctt cttcagcatc actccccna ccctnaggct ccaggaaaga  360
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ccagttgagg gactgnactc cttctgggna tttcaggctg caggaattca accattcctt  480
gatggggcaa ganaagcttc nggaatggcg gttgacatgg cactttcttg ntggagnccc  540
tgggg                                           545

```

<210> 8797

<211> 481

<212> DNA

<213> Homo sapiens

<400> 8797

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cactacagac agaatatctt attttattgt gtcgcataat cctttcctaa aaaaaaaca   60
ctgcttctcc ccagttacaa gagactaaaa gcatactaaa aacactttat cgtcattact  120
aaatgcatta aatacacatc ctaaattgaa tatgctgtat atccgatgaa atacatagaa  180
cgttcatcaa ggcaaaagaa aagacgtagc caacaatgga aagatggcac acacaagaaa  240
aaaaaagaac agttctcaaa tattgcagta acttttcaat gtatcataga tattctatga  300
cttttctatg aaacagagga ggaccaaaca ttatacacag tttgaagaga ctaaattgcca  360
gagaatctac agatatttagc atccaggaat aatttttatt cctggcccat tttctgcccc  420
ctggaaaaaa ttgcattggt tttccttcn aagaggncnc ncaaaaaant tntttccatn  480
g                                           481

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<210> 8798

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8798

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gaggttcana aatgcatata ttttttacit acaaatatc atctgaccaa aattcaacat   60
aacctttatg gaacacttaa caattgtttt gtttttaaaa taacatttca ttcaaactgt  120
atataattca gtaaagtttt ttatacagca agcaatgctt aaaccctgga aaatntgtan  180
aaaagagatt ttcacacaaa ataagaaaag aaaaatctga ggtatccctc acacacacac  240
atccattcat tctggcccat gtacgtgcac atacacacgc atgcctgtgt gttcacacag  300
acatattcat tctcactcac aaagnggctg cagcataggc aaaaattgta ggtccaaagg  360
aaaatgattg attgttctaa taaagagtcc gagtagctca gaaaaaaaaa ccaaaacaaa  420
acacaagagt cttctgagga aattactacc tcaaaaaaat gttctcaaga tgaatttgag  480
atctaagcct actaaactgc ttttgcaaaa cagcttcctg cagtccaagg ngacttgggc  540
aatagaaag gaat                                                    554
    
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<210> 8799

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8799

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atgaacttct tttattcaaa tatattttca cacatcttat ctaaatacat aacacagaag   60
cctgtgtgac ttgggcaacg tgggccagga gggcctgaga ctaacacatc cacctcggca  120
aaaggacatc aaatatctct tacagtcgga acaaacagcc ttttgtgtat ttccttagtt  180
tacgaaatat actcgaaatg ctattattag ctgaatttgt ggtttccttt tgagtttctg  240
agttattctt atttattttt cccattttgt ttttgacca aggagaccgg agtcaaataa  300
    
```

tactcagcga ctgatttcct ctctttggac tgaaaaatta aacagatact aaatgatgac 360
 agtgaattta gagagggctc caagggcttg aaagaacatg tctgggataa tatggtgctt 420
 ctaagagtat tgcaatcaca tcgtggcaat caccggcgcg tgccgcgtga ctacctcctc 480
 ggctaatatg ctttcttctc ggcgatgact aatcacgttc tattaaacag cagtaatgcg 540
 ggaagaactc ggctgtncaa gtgtaaagg 569

<210> 8800

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8800

agcaaaacaa aactgtttta tttatcaaag acaatgaaaa aattagaaaa tacagaagag 60
 gttataaagc ataataaatt ttatTTTTTg gaaatggaaa aatgtccctg aatagttaga 120
 tgtacctttt agtagtaatg tctaataata aataagaaat caattttata aggtccatat 180
 agctgtatta aataattttt aagtttaaaa gataaaatac catcatttta aatgttggtg 240
 ttcaaaacca aagatataac cgaaaggaaa aacagatgag acataaaatg atttgcaaga 300
 tgggaaatat agtagtttat gaatgtaaat taaattccag ttataatagt ggctacacac 360
 tctcactaca cacacagacc ccacagtcct atatgccaca aacacatttc cataacttga 420
 aaatgagtat ttgcatactt cagttcagga tatgtttttt acaagttaat cctaaagtct 480
 taagccagga agcttttctt agtncaggat tttattggct aagctttaca aattaaccct 540
 taaaaaattn ttccanggtc n 561

<210> 8801

<211> 376

<212> DNA

<213> Homo sapiens

<400> 8801

caataaatac atgctgattt attacaggga taagatggtt tcttggggga tagattcaag 60
aggagtgan aatgttttat tcatttacia tgncccttct ctggaagggt ggacagcaag 120
atttaggaca agctaaaatc atcccctatt taaaaaaaaa aaaaaaaaaa agtcaccagc 180
aagtantccc gggngggagg tgggagcana ataaaaaaaa atctgcantg attcctaatt 240
gtttttcaat acanaancct gggaagggtt ttctgccagt tcatgagga aggcccaact 300
tccaggtagn gttggggang ggtatgaggn cctatgcagg ctggcctctt atcccacaga 360
tgccaanatg atgnnn 376

<210> 8802

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8802

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cactttgaaa aacacaatga ctcanaggca gtcaccctt gccagcaatt ccaagagctg 180
aggaggcttc atgcctcagg acatggtgac tagttgagtg aaccagagat tgaggcagtg 240
gtttttacag gggaagaaac aagccttggg tgtatgggag caggaaagga ggggtgacaga 300
ctggagaaat gataaaggcc attttgaag cccacaggga agtggctctg ggaaacctga 360
agacactggg atattcagaa ggccaagggg atccagctta tcctgttggg caaggtgctg 420
ggagtgaagg caggtaagcc atgtcaaggg cctgggaagc aaggggaaaa ctggaagggg 480
taccacaggt gaagaagggt atggaatggg gtgcanaagt ccatggagat gaccggcaga 540
tctcaggccg gtttttggca catnaaa 567

<210> 8803

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8803

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attttccag aatgccttta ttttcagtat catagaattt aaatacagag tcaaaagatg   60
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ctatgttctg aataagtcca ctatggatat atataggaag agatatacat atatccatcc  180
acagatacac acacacatat atatttctgc atgtatatat acataattct ttctatagtt  240
acaggaaata cttcttctat aattctgatt ttgactccca tcctccacca tttactcatc  300
cactcattac ctaaatcttg gctttctttc ctatatgtga aataatccat ccaaacttct  360
agccagtact gtcaggaggg ttcttgctcg agtgagctgt taatactatt ttccactgac  420
aacttctgca catcgaggga cacagtgtat ctgaagactc cgctgnatac ttccacaacn  480
gggggcattt tcntttgtag tcggcatgga caatacttat aggaagaact nttacgaatt  540
cnccccctta agtggggg                               558

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<210> 8804

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8804

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gngtgtgtgt gtgttttgnt tttgntctgt ttttaataac aacagtagga cccaaactaa   60
aaagtcggtt catnttcaaa ccaacaagag cactagagga cttgngactc agtaccttca  120
tataacacca cataaataac tttagccaca gtcaatgttc acagcctggt cagtggaaca  180
aaggaaatac ttttctggcg attagacgtc atntgcagag agagctggga tattcatccn  240
aggccgggtg aaaaatgcc a tcttctccct gaaagactga acttntgggg gttccttaca  300
gctntggcct nggagcctgt gcacatcctt ggcagctgcc ctcacatct tgnctgtctg  360
aagctcaccc ttgtgctccg ctcggnccat ccgcttctcc agcatnctna gcagcaggcg  420
gaaacgctcg tcctacgcaa ccaactgtggc aagcttcttn tcccngggt cttggcttgn  480
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<210> 8805

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8805

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aatttcggag atgtatatc tttggccttc gaaattctgg agcaaaaacg tctacaagca 120
ttttgaaata ttctgtgcct tcggcagaat ttcgtgtgtg atcactgagg actgaatcca 180
aatgccttgc tgcttttaat gtttcttctg caagaccttc ttcttttact agttcttcaa 240
aatttacaat atcttcaaga tcaggaacaa atctaattggc attgctgcta caatgaagac 300
caccagatct tatcattcgt acatagccca tagcattacc aatctggctg atgagttgcc 360
tgaattgatc aaggtagctc tgtccctcag gtgttattcc aagttttctg atgcctcgat 420
tgaatttttc tgctctatca aaaggatact tatgatcatt tnggccttaa ttccctgaa 480
aaatcgaata tctttaatca atctggattt gatgggtcat catacataaa ttggctaaat 540
ntntagaact tctttttcaa aa 562
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<210> 8806

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8806

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ggggaagcac aagctttatt ggctgaaagt tcttctcagg agcctggtct gctgggactg 60
catgttcctg gatgggctcc cccaggccta agctccaggt ttctctggc ctccgaagg 120
atthtngggg ttacnaccaa ctgatcaaag atgacttttt cctggcgctt gctcanctgc 180
aaaagcttca tggngttttg caacctcttt tcttgntcaa acaatttttt atgtagtttg 240
gngacctctg ccttcatttc tccaatctgc tcacagtga gggggcactg gccatcctcg 300
gggagtgaga ctntccanan aagcttcanc cncctgtagg cctnttcag ggtcancttg 360
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gccgtgctca cactgctcac aaacttgctc agtgggtgctg ggtgtggacc ctttgttccc 420
agctcttgac ttgtggagct gggagcctct tgggtttgaa tgccatttca gcaaggacct 480
ttgccctggc tgaactgttt ancanggnct ataagcccna aan 523

<210> 8807

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8807

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caagagaccc aggaccctag atctttcttc aaacgcaagt gtctcacaca cacttatttt 180
acaaatccac tagaaatatg gactcttatg ttctttgtac agccatgcaa cagaggccta 240
gcatttgtgc tgtgtctgtg ggaaaggcag tcagagacca gtggtttccc tgctttgggg 300
aagatggctc aacagttagt aatcccaggt tagattgtca gaacagtcta ggccaggact 360
gagggtctag ctgccagggc tccccaacag aaaccactcc cctctggctg acactgcttc 420
cttgcgacc agtctcttct tgnatccag gggtttggct aaggcccga tcacctgtgg 480
tttgtacngc agcagcacan ggggtggcag gcgaatgana acatgcatgc actgcaatgc 540
ngngaanc ggacaagcc 559

<210> 8808

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8808

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gtcctccagg tgcacgtgg atgcgacagg ggtggggagg gaggaggaag tgactgtccc 180
 acctntgcag gaccatggga gtgggcaagg tgttctccgg ggcgcacccc tgaacccagg 240
 ggtgctgcag gacttgggcg gcactcagcc tctgcttggc gtcacggacc ancagcttgg 300
 agatgaggtc tttggcancn caggagatgt gggcccagtc cttgnngggg aactcgnact 360
 tgccctcctg gatgctctta aacagcatgt tctggcnngc a 401

<210> 8809

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8809

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 tccccactg atctggaatg atctacactg ctagtgaaga ggagggatgg caagctgact 180
 aaataagaag gcaggggaaag aaagtccgct ttagttctga gggctgtgac attagatgag 240
 agtggagccc tgggcatgtc agccagcctt ctgtgtaacg cccgcccagg tcccattgtg 300
 tctgttctct cggctcctcca ctgttgccca catcttcctc caggctgctt aagtgccccct 360
 cctggagtgc atgagtaggt cgcgttgagc cccagcctcc aggctggagg tcagtctggc 420
 tgtgggaggg tcggtcggca gagtcaattt gttgaaaaca cctctgccaa agtagtcagc 480
 aatcacagaa aactgcattg gagcacctga gctgatgctg gaattgatca tggaactcgc 540
 ttctggttcc tggg 554

<210> 8810

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8810

gcagatcata gtgcttttatt aacaaattca tgtgttcttt tcccatccct ttaatacaaa 60
 aaaattattc atcagtttatt ttcattctgac atttactaa gtacagaatg cataatgtca 120
 acattattag atcagccatt caagtgggtc acataagttt atcctcattg tgccaaattc 180
 ccactcaaag gataagctga ataacagatg cctccaggtg tatacaacaa ccttagtttc 240
 ttgacttgaa ctagtcctgt ttaacagggtc aaactgctag tctttctaag taaactaaaa 300
 aagactcaag tacacagctg tacatacata tcatcagatg gtaagttcat ttcaacaaga 360
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 aacaaactta tagtttagaa tttaaaacaa tcctgatgag acaaaacgta ccagggtggct 480
 tttctgnagc agaaattaat tccaccatct ttnccttaagc caatttaaag ccaaccaagt 540
 tggaaaataa atttgcagcn ttcngtaacc aaatgtctnt 580

<210> 8811

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8811

atataaaaat aagtgtttat taacaaatgg gctcagagta gaaaatgcag acagatgggt 60
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 gaaaccaaag gctggctccc ctggccgagg cctgggactg atgcaagaca gccagccagt 180
 cacctccgcc tcccatgaac ctcttgaaa acttctcctg tcccattct gtcaccctcc 240
 agctccttga gagagccaga gttgagaaga aaatgagcct gaagttgaaa gggaaagttc 300
 ttgcctgaaa cagtgtctggg aataagtcca gaccatttcc ctcaagagcc acctcttcac 360
 tccttaagcc agaggacacc acaaagacac agttaatggc ctctcatgcc actcctcagg 420
 tggcttgtga gggcagccag tgagggtactg caggatttca ngggaagtag ctcanatggn 480
 ccactcagaa cttttggaag aatttgangg acaagggtccc gcagtcgcac ttttgagcat 540
 nttggcattg tccaaataaa tggggtcaag ctttttcaat cng 583

<210> 8812

<211> 506

<212> DNA

<213> Homo sapiens

<400> 8812

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agaacaaaat ggttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa   60
aaggctcggc tcctggtgag tgggtgggttg atcgctgcat ccagtgtaaa gcttggggct  120
gctggggagg gaggggccga gtaagggaact ttcccatctg agtggctcag gagacccacc  180
cctctccctt cagagcagca ggggacagag aaaagccatc acttcttttg tctttgtggc  240
ggctcancat gtgggatggg aaggagggca gaaagggcag agaagggcc ttagcaggaa  300
gcgccacctc agcagagtag gcctggctgg gagctctggc agaaaggcca cagtgaggct  360
gaggagcgcc caagaggaga atggccgtag tgcagaagtg ctggcatgga tgggtggggt  420
aaggtgcant gccccaccct ntgccanggc ccttgggaaa ggcaaaccct ccaaagtggc  480
catgaaaata ggtncagggn cnnact                                     506

```

<210> 8813

<211> 473

<212> DNA

<213> Homo sapiens

<400> 8813

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actttgagta tcttgctttt gaagctgttt aatacaacaa tgatatcttc taggtctgct   60
tgagagtcag ttccttnatg cccaactatt tgataaatat cttcagattt tccttgggtg  120
aacctcagta tccaagcacc tgggtttgct tttaattgaa aatacccatg atnggccatc  180
actattgtat caaccacagc aggtttatct tttgngccta gngtgaactg cagaccccga  240
ggaggctgtt ctgtcacttt atcaaagcat tgtccttcca gtagtaagta ttctagttca  300
tattctgctg taacagtttt ctgagtatcc tttaagngaa tattatcaag gncacagttg  360
ctgtgcactg tttcaaccaa ccagccttct ggagtaatca tggtgaggat taggaggggt  420
gattcaggaa tatccaaaaa ttttgccnct ggnccaanan aanaaacgnn tta          473

```

<210> 8814

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8814

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cttgctaate tttctatatt taggggtag agacgggggt tcaccatggt gccacagcgt 60
cctcccgcca cggctttcca aagtactggg attacaggca tgaaccgccg cacacaccac 120
ttgtatctcc tatgcccggt tcaagcagca gcaggggcgt gggaacggct gcacctgcac 180
tgtggcagct cgcaggcctc cctgacgtcc aggcggaggc tttctcaagt gtgggtgcct 240
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tcctcaccac cggctggaga tgcctgacc ccctgcccac tgcgccctaa cattactgac 360
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tgagggacgc ccaggccccc cactccctg gactcacttc tgtcccccg agagaccttg 480
cccgggacat gtacccacct atgccctcta ctggccaact tancctggg gaaccaatgg 540
gtgaagaagg gaagtccctc cggncagc                                     568

```

<210> 8815

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8815

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aacagtccag ctgtggttta tttggtacat tcataagatg ttcactccta tatatatttt 60
ttccctaggg gtttctcatt tctagattta cactttccct catagcatgg tccctccaag 120
gtatatgctt ccgatacata aaatgtttgt aattttgtta attctgcat tcattagctc 180
aataatttct ctcattaaaa ttctgtaaac tatgaatttc aaagaagtct attctatatt 240
catctgggtc atgaagtttc ctctttgnga atcttatggt agtaaaatga ctttacaacg 300

```

tttaacatgg ttcctcacct gtatgaactt tttaaaaaaa ggtatgactt gctgctaaaa 360
 attttcagag tggttactaa attcagtttt cctgtgtatt gnctactatc tttttgcatg 420
 taaagaacag ctttctgngg atgcctttcc atatgctggg cattcataaa gntctattca 480
 gtatgagttt tctggaagat gncagaagga ttcncttacc gagttctctt tatatatgan 540
 ggntctatcn 550

<210> 8816

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8816

acacttgggt tttaggtatt tatttacaaa gttcttacta atacaattgc ttttaaaatg 60
 tagcaaagag tcatttacta ctctcagaag tggcacatac atggcataga aaacaatcta 120
 tagtcagtta actattaaaa cagaaacttg aaatttaagt gacaaacgtt tgtagcactc 180
 cctaaagaaa taggaaataa aaatgcattt atccatatga acttgattat tctgaattac 240
 tgactataaa aaggctattg tgaaagatat cacactttga aacagcaaat gaattttcaa 300
 ttttacattt aattataaga ccacaataaa aagttgaaca tgcgcatatc tatgcatttc 360
 acagaagatt agtaaaactg atggcaactt cagaattatt tcatgaaggg tcaaacagtc 420
 ttaccacaa ttttcccatg gtcttatcct tcaaaataaa attccacaca ctatcaaact 480
 aaatcaagat ttgctagtgg ataaaattac cattaatata ccgactctnt ntggaacagc 540
 tccaacatct ggtttttgcaa 560

<210> 8817

<211> 484

<212> DNA

<213> Homo sapiens

<400> 8817

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 gaagctacaa ataaagctta cttctactga actcatgaag ctgttcctag tgtcagtttt 120
 gagtttcaag tgaagactga atgtcaactg caggctttcc gaattcctcg accatgtcca 180
 tccatggatt ctcttcttgt ctagatttcc aagcatgaag atgctaacta aagcatttct 240
 caatggggaa cacgaaaaga tttctattat tgtgggttct ccggtgttcc taaaggctga 300
 gttataacta aaggatttca acctatttgt gagtttgatg gtaacgctgg aaaaatgctt 360
 gaagttgtta ctttgcicac tataggagta tggtttccct ccagganggt ttctctaaaa 420
 ttaagagcta ttctacaaca gagaccctn tacacttaag gnatttatgg ganenggcct 480
 ntna 484

<210> 8818

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8818

ctttatacag ttcactttta atcattcatc caaaaaacag tttcttccca tttaaaatgc 60
 ctattcatac atttgagtta ttccctttgg attatcgga gccagattac aaaatttagg 120
 aaatgctacc aagtcctctt tgaagcaaca ggcacataaa taatttaaaa ctctggaaac 180
 aatttttaga accttaatgt gaaaaataga ctttttttta atgcatactc atttctgtca 240
 aaggctaggc taaaagcttt ttgagggtca cactgcgtat accccttct catatgatgg 300
 gtagttttgt ggacacagta aagagttaac ccagcttctt cggggacacc aggtcactct 360
 ttctggacac ctgccatcag ttgccatgcc taacaaaccc ttccctggaa gcagttagaa 420
 cataccttga gagtttagatc catcttggga gtccagactc atactacctt ttggccttgg 480
 aagtcceaaa tgaaagtaat tgggcccgat gatgggcncg atattcatat tggccacttc 540
 gtccttttga taactttt 558

<210> 8819

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8819

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gngtgtcatc ctcagaccag ccatttgcct ntccaaaaa gctggggcta agcatgtggg 60
tggttcaaga ggggcagccc ccaggcccca ggctgggccc cggtaccagt ggcaggtccc 120
cctgggtctc aggagcttan cttctacgga gctcaggtgt catttatggg gttgccagag 180
caagctgtta aagggcgaat ttggtgaagac tgagctcana nacctggtgg gagggcaagg 240
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canagcttct ggctgcatct canaaggggg cagacgcaca ggccaggga cagggggctc 360
taggctgtgg ctccgagtgt ccctggtgac tggaaagcct gaagggaagc tggaaactga 420
tacnggatgc ccgtggcttt gtgaaacana atgagctctt tcttntgaa aaagggcccn 480
aaggggaaaa aaaaaaaccc gacnttaca ctgggtcctt cattcctggc ccnggggana 540
natt 544

```

<210> 8820

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8820

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cgcatgtgga tgacctggtg gcaactgggac agagagccag gtcacacggc cnttcccacc 60
aacccccagn ggtgccaaagt caaatattt gttttttaaa cacaaacttc agtgggaggg 120
gaaggggagaa cggaacccca cacccttag gcacctgcca tcggttgtcc tttggaggaa 180
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tggggatgaa cagcgtgctg ggttgttggg aggattcaac aagaaagtgt ccaagtgggt 480

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gcctggncctg gngcccaatc ccccgaaccc antttgcccn gtgaggnggn ccctgtccnt 540
tgaccatttg ccggggccgg g 561

<210> 8821

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8821

gcaataaaag cacagattta ttgaagcaaa agtatattcc acagagnggg agcaggctaa 60
agcaagctgc tcaagagccc cagttgcaaa atctgggggt taagtaccct ttaggggttt 120
cctattgggt acaccctatg cgccaccaat cggaggccga agtgaaggct ccagtcctcc 180
anactcttat tctcctagct caaagaaatc cactgatttc ctctgtagca tcttcagggt 240
ccatcttgac aacttcctct aaatccccag gggaanagtt gtttanagac tcctggatgc 300
cctgaggggag cggntccana gcttgccctc cctcctctgn tttcacaacg gtccagcgat 360
aggcactggt cnttgacaat ccttcttggc actgtttatc gactggtgga ggccctgggc 420
tatgttccac tttggggaaa acagtancag anagaggaga atagntcctg gggctctaata 480
tngggtctan gncctgaaag gcattttccc attagcccca gacaagcaat ggcccn 536

<210> 8822

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8822

canggaactt aaagagatta tatttcaaca aattaagtcc tcatttgtat gcaaaattat 60
tcttccaatc ctctcattac tgacagatga tgagtcaatg acctttaaac aaggactctg 120
cgctaggacc ctaaactgta tgttaaaggg ttagtaggtt cagtacattc tttgtgggtt 180
tatataattg ctttgcaatt gattaaattg ctttctttta aaggaatata ttaaaattcc 240

tttaaaaaaa aagcaacatt ttttgaaaga agggatatgc agctataatt tcttaaatat 300
gcataaaatg aacatatgtc aaaatcggaa atgctggcta ttcttgact cctaacatag 360
gaaaatgggtt tttaaaaaat taaagaaaaa agccaaacat ccttaactta agaaacttaa 420
ggagttttca caattcctaa gtcaatattc ctgactaaga gccttgacta tgaagaggca 480
ggaatntaaa gaacctcaat aaaataaata cngtaaaaac caaaccaaaa cttgggatat 540
agaatcttaa atctttgggtt ttc 563

<210> 8823

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8823

catataaacc acagaatata ttttaattcaa attaaacatg aaactagaat aatgttcggt 60
ccttatcaag tagcaattac attgtttaaa aaaaaaaaaa agaacagtac atttctgtct 120
acattccgac aatccaacga ggcggcatgg gtcacatcca gtttgatgag gtgacagacc 180
cagcagtcac catccatggg catggttctg aggggactgg ggagacacag accatacatg 240
atacaaaatg attctgcagc aagtctgaag gagcgcagcc tccctcctaa tacataagaa 300
tgaacgtcca ggtagcagag agtaggcgac ttgcataatg agcgcathtt attaaataga 360
tagttaacgc actgcttctt actcattcca agttgctgta ggtgctgccc gnattaacag 420
cagggacaaa agcttcctat gcgcgtttca gcnggaatac tntntccact ccaggcnactt 480
nttgntttgg 490

<210> 8824

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8824

gagacagagt cttgccctgt tgcccaggct ggagtgcagn ggcgcgatct ccgctcactg 60
 caagctccac ctcccgggtt cacgccattc tcctacctca gcctntcgag tagctaggac 120
 tacaggngcc caccactaca cccggctaata tttttgtatg tttagtanan acgggggttc 180
 accatgttag ccaggatggt ctcgatctcc aggatcagtt tcttgagtct tttctctttt 240
 gcctcttagt canaatccta agaacataac caggaaacaa atgaggcaag caagatcctg 300
 ctataaatca aagaactact agactcatga aataatttta aatgcgtggt aacctagagt 360
 gaaaactaga aattgacagc cccaattttt ttttaagggc anatggtact ttacatcttg 420
 ggncttaggc ataaaactat ctggaacaaa aggctangga tcgagtcatt ataaaggcac 480
 tttatgccta aagatttcaa acttggagct ttttaaggga attgggggttc acttanttaa 540
 acaccagtng gaat 554

<210> 8825

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8825

atattttagt gcacaattta ttttaaaatc cacacaagaa acccagaaat gcagcattat 60
 cttcagacat cacattctag ctctgtttta ataccacata tgctaaaaac cgacgccagg 120
 acattctcta aatgagttac aaatcagttt ctggaaagga agtgcctcat gaaaagctta 180
 tagcaagata actcaggctt tcagggtggcg tatggcacgt gaattagcct tacagtaatt 240
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 gcatacgctg agagaaccgt caatatgcct ttgttctctg tgagggatct gccattctgg 360
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 gatcatttct atataaaact acaattagct gaactatggc aaaggtcctt gaacataaag 480
 ccttcttcat tcattggatc ttaataagtn gaaggcncta ccggaaagct gnttaaagga 540
 ttttaattnc tccagttttg att 563

<210> 8826

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8826

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ccattacagn gcacatttat tgactctgtg tatcttcaca gtgtgatctt caccacagct   60
tgcaaagngt aaccactcag caccttctgc ttccttctgt tcagtttttc cactgcaatt  120
cttccagcat aattttctga tagccagtgt atgactttgg ctttgacttg tttctacaca  180
gnggggccag tcatttatct ctggaacttg atcagtcctt ttccaggtat ataagcaaat  240
ctttccacac tccaatccta ctgcaaccac gtatcgttga gaagggtgga gcactgggca  300
gacgctgaca gctgtcacag cccacccac gtccaggact gaggagcagg ggccaatgtt  360
gtgctcaata cagtcacag tggagtcgca ctcacccag acaaccacct tttgtctcg   420
actcccagtg aagaaatact tgctgtcagg actccaatca caagaccaa taattctact   480
gngcacagaa gtaatttggt ggggtgaaggc aaaaagacta aaaactggct tgaactaggn   540
gaaaatggga tcccggtttt tccaaagn                                     568
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<210> 8827

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8827

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ccagttaaat tcagttttat tgttttccgt tacatgttca ctccctgttc cttctcgccg   60
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tgtcgctttc taaagggtcg tgacattttt gtacatcttt tccatctttt agtagcaagt  180
ggttgctgca gaccagaagt gaaccaaata aagactcctg ctctgtgcag ctctcagact  240
cctgctctgt gcagctctca caaagatcac agctgctttt gtacattcca gtaactgcat  300
gacacaaaac ggtacctgtg agcaggaaac acattcacac catgagacat gcacagaggc  360
aggtgtccct gagcgaagtt gtgcagagat ctaggcctag gggcagtcag ctccctgccg  420
```

aacacaacct agaaaaccaa ggcgagaacg gccccttgcc ttncacancg agggcanang 480
gcaaaagccc tttcctgnga attccaggag gattcancca agggtaaaag ccccgggtct 540
ganaaaatcg aatc 554

<210> 8828

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8828

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tttataaacn caacctatct tattataaat ncaaaataag aaaaagngat ncgtagctg 120
ttatgaagg ngaaaacatt atataaacct caaaaggctg ctttctgcat ctgcatctat 180
gtaatttcat ggttctntac caatttcatt tacagaaata atctctatag tcaaattatt 240
gntcactttc atgccccaac atgggaagng gtaggnga atctgtagga atncaattta 300
ttggctgctc ctccactcan aagtagccct gngtctgtcc agtctacact canaactttg 360
ncttcatgag cagccagatc atagagagga gccttacaac ttcttgatc ccacagctta 420
acaatgttat ctaaagatcc tgaaatcagc tgctgttcat gggtaggag accatittac 480
tgggggcacc caccngtntg tgacgttggg gnnagggacc ccaaggaccc atnttngtt 540
ngggac 546

<210> 8829

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8829

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tctacaacag ttataatgcg acgattcaga ggtggtctca aagttgttac agtgtaaaa 120

aaattatagt aagcagtata aaattacaat ttattatggg gccaggggga ttcacaacca 180
 tccttaaaaa cattaagagc aaaccacggc caggcatggt ggctcacacc tgtaatccca 240
 gcactttggg aggctgaggt gggcagatca cttgaggtca ggagttcaac atgatgaaac 300
 cccgtctcta ctaaataatac aaaaattagc cagtcatgat gtcgtacacc tgttggtccca 360
 gctactcgga gggctgaggc atgagaatcg cttgaacctg ggaggcggac gttgcagtga 420
 gccaaagatag cgccactgca ctccagcctg ggaaacagag cgagactccg tctnaaaanc 480
 aaancananc anngaaac 498

<210> 8830

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8830

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 ccagctcatt aaaatctatg tttcaaattc cctggatttt cccaagttcc agactggtaa 120
 aaagtatttt tacatacaca ttgatgctc acattacaaa cttaatatct ataaacttga 180
 aacttgtttt gcacaagtct atggctttac tacttttcaa gacaaaagtc acatattaaa 240
 atacaaacta ctcaaaagca aatagttgtc aagaatgtgg ttacaagac agatcttaca 300
 gataatacag actatattat gatttatctg ttigaaaaca gaaagtagtg tattatactg 360
 aattctggta taagggtgcg aggaaacttt acttacaatc ctttattttc ataaggtaaa 420
 caccaaagta tttctcacat atattaccac cagatttttt ttaaaccaaa tttccggttt 480
 aaaaatcaca cactggccaa cacagnaatt cgaaatgcta ggaaaaggct agcatntgaa 540
 ggaaaacctg gcttaagcnt tctaa 565

<210> 8831

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8831

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aacataccc tttattaaca tctaggtaat atctgtaata ttccttgctc ctcaccccca 60
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ttttggatgc atgctggggg aggaaagcat attgtttgtg gtcaccctgg cgtgctaagg 180
tatattattc cccagtaatt ctctcaaggt gggcatatgc aaaacataat ctctaaattc 240
ttcaatacta agaaataacct ttgttttacc cctaaaatca aatgccattt tggctggata 300
taggattcta ggattaaagc ctttttccag cagaactttg aagacattgc tccatttact 360
tctagcatcc agtgtgtcca gtgataagtc tgctgtcaac ctgattcttg ttccttggtg 420
ggtaatttct cttctctctc tagaagccct taattatttc tctttatcac tagaattcca 480
aaatttcacc aagaagtgtc taggangcag tctcttttat caaattttac tanggnacct 540
cgacaagcac tggcaatttn ag 562

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<210> 8832

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8832

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atttgagaca gagtttcaact cattgcccag gctgggggtgc aatggcgcaa ctgtggctca 60
ctgcaacctc cacctactgg gtccaagcaa ttctcctgcc tcagcctctg gaggagctgg 120
cattacaggt gccgccacca tgcccagcta atttttgtat ttttagtaaa gacagggttc 180
cactatgtcg gtcaggctga tctcgaactt ctgacctcag gtgatccaac cgcctcggcc 240
tcccaaagtg ctgggattac aggtgtgagc caccatgccc agccagcaaa cagttttaat 300
ttcactgtag tcttggtcct ctttgaatgc agtctctctc ttttttttg gggggggggg 360
gacagtctcg ctctgttggc caggctggag tgcagtggca tgatcttgac tcaactgcaac 420
ctctgtctcc cgggctcaag caattctctc ctcacctccg agtagctggg attacagggg 480
tgtgccactg ggcctgggta attttggatt ttagtanana tgggggttca ctatcttggc 540
cagctgggct tga 553

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<210> 8833

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8833

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aaagttagtt aaatacagtg cctagaagga acagacggcc cagcgcaaca ggtcgaggcc 60
tttgtccttg atgatttttt tttcctctgg ctacgttcag tccgactgag tgcagcgcta 120
tgcatatgta aacatattcg ttaaagccga tcacctttaa ggtcattcgg aaaaaagcgg 180
tccttgtttt cgcggtgtgg gtgtgggtcg taacagcagt ctcatcctcc cgggaggaag 240
gctcttgggc gttggagagt cccactcggg ttgtgccaca ggacaatgtg ggcagggcgt 300
gagcggctcg gcgggcgcgg cccgggcgtt acctcctgcc gatctcgctc tgccgcagga 360
actggatgtt gttggcgctg tcggccagct cggggtactg ctccaccgag agtacgtagt 420
acccgtcgta ccttgcacct tgccggcgct cagcaactgc cgttntcgc ccttcgtcca 480
nagcccgcgc cttcttgccg tcgcgcaccc cttgttgttc gcgcgccaag cccgggcaac 540
cgntgcc 548

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<210> 8834

<211> 350

<212> DNA

<213> Homo sapiens

<400> 8834

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aagttgaaca gaacatttta tttctcagca attctatgcg tccaaattaa acatgagatg 60
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gtgaggctgg aagaggactt agaagagtat gaaagtcctc taagatttta tctaagttgc 180
cttttctggg tgggaaagtt taacctagn gactaaggcc atcacatatg aagaatgttt 240
aagttggagg tggcaacgtg aattgcaaac agggcctgct tcagtgactg tgtgcctgta 300

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gtcccagnta ctcgggagtc tgtntnaggc caggggtgcc agngcncnn

350

<210> 8835

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8835

cccttcaaaa acttttattt gtatcaacag ttcctagctc ttgacttagc ttagagcttt 60
 taaaagagca gacaccttat atatttgaga ttgaaaaagt ttctgctatt aatcagaaat 120
 aatcatttct attttctggc ttacccttg gaataagcca aaaataaaac caaagttaca 180
 tttcctgaca gatggctaag aaaacaatag aaggaacatc ctgaattcta gagttgactc 240
 ttgctggtga agtacacctt cagcttagtc cattctccta agtaaagcct gaaggaaaac 300
 tcttaacacc taattctttg tggaaaaatg atcaactagc catttcacag gctatagaac 360
 aaaagtacaa ttgggcatct ttccttatgt cctgggatca ggggtgctta catttaacat 420
 tgatcagga aagaggagag gctgtgccta aggtctgaga aaaggcttgc tctaagcaag 480
 ctgnggtgag gcacaggatg actaggaat ggcaganaac angntggcct actgtcagnn 540

<210> 8836

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8836

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 attcangaac attgggctac gtgtcatttt gcttaaagtc agtttctaan aacctttcga 120
 tggcatttaa ggacttaact ggagttncaa ttgagtgttt actatgtgtc ttgcacctnt 180
 gaatatttaa cgtnttacct catttaactt tcacaacaac aacttatgta ggnagtagta 240
 taatctngat ttactgaag aggaaacaaa ggntaatctg gccacggtca ccttactagt 300

gagtggttgg aacagatatt tgagaacagg caacatggct tcaaaatcta agctcttgcc 360
 taccantaa ctactccctt tcaacgaaag actagtagct tatttgaacc tgaataccct 420
 gaaagtaaca agcaaatttt ataattcctt ttctgttgn cagcatattn canattggca 480
 atgganaaat tctttgtttg ccnccaattt ttagaannaa tggggg 526

<210> 8837

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8837

aagaacaaag ttttgggcaa actagtaatt tatttacaat tgtaatttat aaacagtaac 60
 acaaacatct ttacattaat attatgaaa atgtcccatg gctgaaatgg gtgaaaaatg 120
 agacttcagt acatttctaa aggggtgcca agaaaaggga aaaaatgcaa ttacaacagt 180
 tttaggggag agttatatca agtaatgcac ctaggtgcaa tttcatgcag atgtcttcaa 240
 ccactcaaac tgtttttatt agatattaga ataaaatttc ccaaattatg ttgcctttta 300
 ttcacttgat ttccataagt aaatcaaaat gactggctgt taacagggta catctaaata 360
 tttctcccat caaccctta gagataatcc cttacatttt aggacatgtc agattgtggg 420
 tattgcaact tcccaaattg atttacaaa atactattcc atggccctaa atgtgttcct 480
 ggacttctct taccaaattg gctaatatgg accattataa attaaatgaa gaacgctgca 540
 aaatccgcag acaatttcaa gacnnttaa 570

<210> 8838

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8838

actgaaaaac tcagacttta ttcagattaa gttcctctac aaaaagtagg gttctgtccc 60

atgtgtctct gacncattta caaaatacca gttttttaaa attttgggtca aattatgagt 120
 gggttgattta aaaacttttc caagaagaag aaaagcatgg agtcgtaatt taaagaactc 180
 aataaaaaact tctatTTTTT attttaaaat aatatacnca gngttatTTT cttcaagacc 240
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 acaggggata ggtgatccac tacttgctgt anaatgncct tactttcact aggaggcaga 480
 ttactgaaat agtattgggg gaccagctgc ttaaatagtt ccaggagaag attctgaggn 540
 aatccnggaa gnantgggtcn 560

<210> 8839

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8839

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 gtaaacataa acaaatcatt acaatacaac aggaaaagag ctagagcgaa gatatagaac 180
 aattgcacag aggaaagagt aactaattct gcctgaaggt aacaaggaag agatggcact 240
 tgattttgaa gtttaaggat gagtgatatt ttagcacggc agagggcaga gggggcacag 300
 ggcattccag gcagagggaa tagcatgtgc aaaggcactg aggtaaaaac atgagcatgg 360
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 cacactagga agtttgaatt ttatcctgta ggcaatggga aggcttcaag cccacatctc 480
 tccatctgggt cacangntnt cntaanagnc tntgt 515

<210> 8840

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8840

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aagctgagac aatgtatcat agtcctatac acttctgagt aaggattaac taactagggt 60
ttgtatcttg cctaaaccac tcactagctg tgacttttgg caagagatca ggaagctgtt 120
cctaatecct aaaatgcgga taatacttgc tttacagaat gtagcagcag tttgcagaga 180
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gtcgggagaa gttgtaaaat gaccagcttt cttatgctta ctcggagtat tattctggcc 300
tttctcataa tggagacagc tttatcgatt tagttgaaga aatgctgaaa attgggggtg 360
aattagacat tatgttttaa agttcaaaga gggccagact tgcgatgac cagaaattag 420
aagaaactag agctttgaga accaggaaaa ggccgattgg aacaaaaaaa gaatgaccag 480
gaaagatcaa atttcctagg aaatgnatat acatgctgat ggcataagga naggctntgc 540
tganaaggat tgggnatgtg aagggtaan 569

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<210> 8841

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8841

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ccataaacia taaaaaattt aaacgaaaat taaaaaacac ttccatttgc tagagatctt 120
aaagtaagaa atacttagga ataaacataa aaaaactgan aatttcacac cttgaaatct 180
acaaacatta accaaaatga ttaaaaacat atatatacaa cccacattga tggtttggaa 240
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aatgncaatt aatgcttcac cggaangttt taagtcactc aaactcaagc caattctgga 540

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atggctttct ggcaa

555

<210> 8842

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8842

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cttgttcctt actctgaact gtaaaattaa gttcataaag gcatttggca aggggtggagg 60
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tgcgaccaca ttctgaatat ttaccaatat tttttaatat taaggcagct gttagtcgga 180
tgtgtttagt tattggtccc tctttttcat ctgtaaaatc tcgaaagaca aggtttcttg 240
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gacactgccc tggatataca tcttttcctc catgtcagtt gctgcatggg tagaaacctg 540
tgganggtgc tggaaaccct ttttacna 568
    
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<210> 8843

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8843

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ctagaacaca aaagggttaa ataagatttt ctcttttaaa gatacaagaa tttagcttt 180
ccttacattt aacaaacttc acagaacaga tactgcaggg gaacaagccc cccccccac 240
    
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ccccccagc tctaagtcag gaagcgaaca tgggcttcgc tccccaggc cagctcccct 300
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 gggctgcctc actgaggatg gccgtatggt ggcaagggt gtggcttgac agcantggta 480
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 ggt 543

<210> 8844

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8844

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 agactaaaag gaaaattttt gngctacaga ctaaattccag atncggtcag gtgctgagca 420
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 tance 485

<210> 8845

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8845

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gngaaaaaac aattttgtac agtatttttag tagttacatg attagcaagc aacagagaag 180
tagtgaaagc tgaagaactc caaatgcatt gctcatagga caaccactca aacacaagca 240
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tggtaat ttt gcatttaaat attngtagta tgggtctaccc atttatctaa catttanta 420
tacataaaat ttttaagtctg ggttctcaaa acggtngctt gggatttngg tatagggggc 480
tggtatctca aagctcattc agtatctttn cttctttcaa anggttaatg ggactggngc 540
aatggttgga a 551

<210> 8846

<211> 693

<212> DNA

<213> Homo sapiens

<400> 8846

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attgttgatga aaatgggggtg ggggcgggtgt gtttggtctgc tgataatgaa ggaatttagt 180
gcagccaggg gttaggcctg ggacctgcct gacaggatgt ttctcacagc tcaggccctg 240
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tgggctaaca ttcttatttc ttacttttagt ataaaaagga aaaagggcgt cgttgatcat 360
ctggctgctt cctgctggat aggggcggtg tgattagggc ctgggttctg gagcttccga 420
atggtttcct cgtaggctct ggtatttagac gtggcaaagg tgaaatatat tatcaatgtg 480
tttttgcatg cttgcctgga taaaacaatt cagccttttg gaaatgaanc gggatacaag 540
gttaaataatg catggcccaa tcattagtaa caggaagagg aagatcaggg gtcctangaa 600
gggggcaacc cagggtatcc atcttanaag ggatgatcct tgccccagga ntcancgact 660
tgatgncaaa agcttttnaa nccctgtcat gaa 693

<210> 8847

<211> 832

<212> DNA

<213> Homo sapiens

<400> 8847

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agacttttagc accatacttg ctatttgcaa ttaatgtcgt aacacagata catttttggtt  120
tgcagtctgt acttgagtag tgtttattta gtggactttg gtaaagccct tcatacatat  180
taatctcttc acagtacaca tttaatgatg gtccagtatt ctcaaaaaaa aaaaaaaaaag  240
cctactttta agactaatca ataaattaaa caaaacaaaa cccaaacaat gttccccccac  300
cccccaaagc tagcagttgt gagttgtatt tatattgaaa cctaattgttt taaaaatagt  360
tctggttctc caaccacccc atcccacccc gggtatgcag caatagtaat caattatTTT  420
attctaccct cccaaaagat tattaatcca gtgttcttta gctttttaaa atataaattg  480
ggaaagtgtt attaataagc ttttttaaaa ggcataattct tctataacaa gaatggcata  540
taaaccaatc aataaaagta ttgacaaga cattaagtta ccacaggcac tggctgttgt  600
ttcaagttgg gatctctatc ccaatatctt acattcatag cattattgag gtagttaaaa  660
tactgaaaat tggactccag gttgctgggt tctgaatgng aatgtgaaag gatataattct  720
cttttgagcc tactttncce caaataattc aaggtttctt ggggtaagga acttcccaaa  780
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<210> 8848

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8848

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gattcttatt tttttaatat aatttatctt gctgagatag caagtcaagt ttataaagaa   60

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gatgcattta ggaataatcc taaaagataa agcaggttta caaccctgca ccgcgcanaa 120
 accctattaa taggcTTTT tttttaata cacatttgta tcttgacctt ttcacttggt 180
 tttctcaaat atttcatttc tgggccccat ccattacagg gttaccagga ggcaaatttt 240
 atctacataa atattcacat gaaaatagta acttacaaaa agaaaaaaaa taaggcagct 300
 tcataacaca attattcttt tacactttta acaatataac ttctcccgtt cagaataaat 360
 atacacccaa tgtatggagc angattcaaa gtggatagtg gcttgggggt gcttaaacag 420
 tgttatcgct tgggacctga agtcctgnng gaagcantgg gtggtctcct tanacatggt 480
 tgggatttng gaaaggtttg tttaccnct cctggaattg ccttggcccc tgcacnccgc 540
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<210> 8849

<211> 600

<212> DNA

<213> Homo sapiens

<400> 8849

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 catcttcttc ctcgtgtatg tggttgggggt gctgtgcacc caattcgtct ttgcaggaat 180
 ctggatgtng gcagcgtgca antctgacgc ancccctgga nangctgcac cccatggcag 240
 gcggcctaaa ctgtaaaggg gcagggcctg ggctgcacac cttangatna aatttgcttt 300
 cccatggctg ggggcgggcc atgacagggc ctctggatta anccaccctg agctctccct 360
 ccgctagcac acaancacan aacgtgaaat aaaccatctt ccagtgaag tgtgcctcaa 420
 gggtcagtct tcaatctcnt cctaaataag ttgggncccta ttttttgett ccaaccccca 480
 ttttgctcct taactttccc cattgtcctg tttccancc cacaggcang cagcctaatt 540
 ngtccttctg caaccacaaa tgccttggcc tggggccaaa aagcnctaaa ggtggggaac 600

<210> 8850

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8850

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cagattcaca agctttaatc attacttttt ctgttataca ttgaattgtg gatgtccttt 60
aattagtaaa acagccacta aaattgtttt tatggtttgc tatcacaaaa gtcgaaggat 120
tgctagaatg ctgtttacct gtttcaacag ctcccatcaa ctaccgctac tcactttaca 180
tagaaataaa aacagctact attcattgag cctattttcta tatgggaatc ttagtgtcct 240
cacacacatt aattcactca attctcccca aactctatga ggtaaactat tatgcccatt 300
ttagactcaa atgtcaaaac catatatgca ttttgttcca ctgaccccaa gtggtaactg 360
tgagtagtag ttctaacaat gaggcatttt ttaaaaagtc ctattaatgt ttacctataa 420
tttaacctat aagggataaa cccatacccc cattgaacat ggtacttttt tccattttatt 480
gtctaatatg tggcaacagt aaatgaacaa tctcatcctt aaaacaggtg ttatgacttt 540
tacntntgac aaacccccga attaatncna aactctcnaa cctgccn 587
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<210> 8851

<211> 591

<212> DNA

<213> Homo sapiens

<400> 8851

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cgtatttgag tcagtgggtca gatggggcag ttgcgctcag ctgcagtccc tgactccgga 180
aacactgtgc ctctcaaatg atctagagct catccttggc gtacatgagg ggcagttggt 240
gttctagtac ccatttagcc catggctctt caagccaatt cacactggga aaaacacacc 300
ctcacaagat gcctatccat ttgagttcat acaggtttta gtagctagaa ctaaaaaaca 360
tttttaaaat tatctaaaca aattggtacc aaagaaaact tgccatactt aaacagtata 420
tatgttcctt tttttggctg aaaaattcaa gtttgtgcta tataaaacac taacagttac 480
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taaagactag gaaaatttgc agganaaagn tattttaaac ttcccaataa tcctaaagga 540
agccaattat aaaactcnaa taatgcnta cttacttata ccnctntttt t 591

<210> 8852

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8852

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aactcctccc acaaacacac cctgccacaa gacatttagc acagaggaac agatccatgg 120
ccactgcctc tgcagtatca aanagaatta gtctttccac aaaacagatt ttaacagcca 180
atctctggat ttctgtagtg gcttttagtca ggcatattta tcatcatatt agcagtgttc 240
agttcctgcc caacatcttt atttaatccc aattcaatgc ttatggatgc tcagctcatg 300
tttaatgttg caagcccat cttagcccat ctttaattcaa acagaaaaga aacaaaacaa 360
aacaaaaaca aaaaaggtac ctgcctggtt catggatccc tagccatcca gggaccacaa 420
tccaaattag gatgacaaag antttccctt agttcaaaat gacatgtgtt ccagtcctaa 480
tcccagatgt taatctancc atagtgtccc tgagccttaa tccatgtgtt taccacatac 540
ttccccctag ctttaaaatn actccccaag ctgaanaaag gnaaacaacc ataaccacaa 599

<210> 8853

<211> 604

<212> DNA

<213> Homo sapiens

<400> 8853

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aaaagctgaa caaaanacta cttggtactc tcttcttggt gtacatggct gtgtcctgca 120
ctgtgccccca tccgcctgg gacanaaacg ggcattccang gtgctgaaac ccgggcaggg 180

aggctactgt ggagaccagg cancagtgt gtgggccccca agcagctgtg actgccctgg 240
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 tccgtggctc ccgaactgtg gcccctgcag ggtgcaggan gcancaccga ngttcccgta 360
 cagcactgac ttgaaggaat aaccgtgggc tggggctaca cntgtctggt gcttgcccaa 420
 ggggatcttg gctctccaaa aatcntcttc acctgggcag gtgccaaagc ccccancccc 480
 acggccacca acacaaccgt catcctccgt actgttnanc caaaaccncc gttgaaccaa 540
 aaccnccng aaccaccaac aaaaccgtca tcccccnta cntttaacca aaacccccctt 600
 aacc 604

<210> 8854

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8854

aaaanaatgc taggtgttct tcccctacca tctcatatag gggaataaac taatttccta 60
 ctaagttatt acttcttcat agaaaactta gagcattagg ggaaaaaagg tcaatagttc 120
 tgtacctttt attaattctta attgcataat cccaactttc aaatttataa agtccanaaa 180
 aaattcctga gcagttaagt tgctttataa tctaattgtt ggggaanaan ttcttgtttc 240
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 aggcaactgt ctttacctgt attaattcat ttaattctta caaccacaaa tgaaccctac 360
 attcctgttt cacaaaagaa nggcctggtc ttaaattcca tctaatacta aaatctgtgc 420
 tcttaaccac agtgggtgtat tgcctaaacg tcttgttct cgtgatttca agggataaaa 480
 tatancagtt tatatttcta ctaaatttcn ccctacacaa atatntcccc aatctactaa 540
 ataccatctc tataacaaat ctttgtntn ttagggccat ttccna 587

<210> 8855

<211> 592

<212> DNA

<213> Homo sapiens

<400> 8855

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gagatggagt cttgctctgt tgcccaagct ggagtacagt ggcgcaatct tggctcactg   60
caacctctgc ctcccaggct caaacaattc ttatgcctca gcctcccaag tagctgggat   120
tacaggcacg cggcaccaca cccagctgat ttttctatit ttagtanana tgggggtttca   180
ccacgttggt caggatggtc tcgatctcct gacctcatga tccgcccacc ttggcctccc   240
aaagtgtcgg gattacaagt gtgagccacc acgccccgcc tagaactctt atagagaatg   300
aanaatgcgt tttgattttc ttttttgc atccaanaca ttgcactcaa gtttctgaat   360
cggcctatta aggttggtgc aaaagtaata ntggctttgc cattaaaaat taaaaatggc   420
aaaaaccacn attagttttt gcaccaacct aacatttagg aaaatggana nttcccccaa   480
aggtgggaaa ttcctgtctt ttncatttat gctgtctatg gtcancacta aaacaacagt   540
gccaccagca ggtgctcacc atccggtatt tgttgggtna atcaaggaat aa           592

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<210> 8856

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8856

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aaaaaacgt gatctggctg tcgcccacac tggagtgcag tggggcgacc atggctcact   60
gcagcctcaa attcctgggc gcaggcaatc ctctgacctt agcttcctga atagctgaaa   120
ccacagacac atactatcat gtcagctac ttttacttct ttctaaaggt ctactctgc   180
tgcccaggct ggtctcgaaa ttctagccac aagcaatcct ccagcctgag cctcccaagg   240
tcctgggatt tataggcgtg agtcaccaca cctggcaaaa agcaactttt tgtatatgct   300
taccagctaa taacatcttg tcatgcttaa atatctatag tttcttttat cataaaacaa   360
atcacaattt tatcatgaaa acaaaccaca aacaaatata agactacgtt ataaaagtga   420
atgtgactct tcaaactgca gattccacct gctctgccgg acctggacac acacttctcn   480
caaagggagc catgaaatct gtgcttccaa atcactggtc taagcaacct tcactcctac   540

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tcacaaatgc caagaaaata aaatg

565

<210> 8857

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8857

cattagaaag tcttatttat ttattacaaa agcaaagctt cattcacaat atgaactgca	60
tactagatat agttatttct gcattaaact gctttccgga atccctaaac aatatagtgt	120
attgtacaac cataatgcaa gttatgtttt gcatacaaaa tatgttcttt acatcaaagc	180
acatgttaac aaaaacaagt tctagaaagc atataccctc taagactaat gaaaacgtct	240
ttagcaggga attaaaaaaaa aattaacatt catttgataa atattttgta gaacttgaaa	300
tgaggatttt atctctgagt attttttgta gtattcccct tgtccagttt ttgcagaaga	360
atggcaaaca cttattttcta aaatgaaata gccctggaaa caccagtggt aattttttca	420
aagtaaattgt ctagccttaa cttgaagttc aagaagttgt agctacatac tacattagta	480
aaatctgaaa taaaattatn ccngttttaa cccctccnca gttcctaaaa aaatnttatn	540
ggananaatt ttct	554

<210> 8858

<211> 594

<212> DNA

<213> Homo sapiens

<400> 8858

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tagtccttat acgagtagtt ccagccattt aaaagttata cagagtttgg gaaaaagcag	120
tttatataca agtcttaaaa cacaacaatc atgaacaatg cacaccgttc aatgtagtta	180
ttgctagtta tatgcagctt ttagttacca ttgttcttct ctgtaaggga aaggacagca	240

tttggacatt ctgattgttg ctgctgaagc tgtggttttg gaaaatcaat ccaaaataag 300
aataagctca ctatgagtag aataaaacgt gtaagtttca atcagtacta caagaaagca 360
tggtttaaat ttgagttcca tacaattcta cataactcta tttgttact ataacanaaa 420
tacagtgtnt agttttgggc aanaattaat gaattactgg ttttataatt aantgaaaan 480
aacagttttt ggtgccatgt taaaacnaaa ctgnatttct ancttacaac cttaaaaatg 540
gaaaaatttt atgtttaanc aaaaccgaac ccaggtnnta ccttaaaatt aaaa 594

<210> 8859

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8859

acttcaggtt tctcttttaa taancaaaac atccaaggta naattccaaa gtacaaaatc 60
aaccnggtct gaactgattg gtgatnagag cactcagatc agtccttcct taaagaaaca 120
gttctctccc tgatgccctc tttggtcact ntgnnaatcc gggagtgcgt cccnngtgta 180
canatctctc tcagccgcag aatgaagac atctttcacc acccgcatgg ctctgtccaa 240
ggacagcgga acatgctcca cattctgggt gttcttaaaa ccaaccnggt tgtcaancac 300
gggctgtanc atggcacttg ctgancctcc agccttgaag gantctctct ggtaanacct 360
actggatcta agcngtgta 379

<210> 8860

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8860

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attatactgc cattctataa actcactgat acaatctgcc cgggattcct gttctttggc 120

caatcgaact ctcttgatca tcgcctcaat ttcattctcta gcctgcatca catctctgct 180
aattcccaaa accttaatca aaggctctctt atgggtccagg gaaatgttaa tatttaactt 240
cttctgcagc tcattcaact cctgatactc cttttcatca aagtctttga tgcactcatc 300
ttcactgggtg taaggacact gttctttttc aatcagggtc tntagccagg agatagcgta 360
ttccacacac gtgacatttt caccacacac ccgaaaagtt gctgattctg ttttcttttc 420
caaaacaaaa tgattctttt ttgggggaga ttgctttgaa aagcccaaaa atgatgcaag 480
ttagacatc acagactgtt gggaaaaaan ctgaatccct ccccttcctc cagttgggna 540
tnaaaccatc cattacttga aggcgaaaaan anaaaaactt taactttttt caanaaatgg 600
g 601

<210> 8861

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8861

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atgcacatta aaaccaacag gtgcaacta caacaatgca tataattata caaatgatgc 120
cactctgtga tgtttacagg attgctgtcc atgcaagggtg atcataggca ttatttatga 180
agccttaaga tccagaagtg ttgttactac caaacctctg attaacactg tgaagtaagt 240
gttttggaag gcagttccat gagttggcta acatttcttt aaagcaaatg actgcttcta 300
agcttagccg tacaagagat ttgggttgaa ctgaaaatat tagtatttca ttactgtgtg 360
cagctctgtg atggacaagc aagttgttgg cacatccacc aaaaacaatt acttctcctt 420
catcgtggc acaagctgtg tgccataacc ttggtttttc ggtatatgga tgattaaatt 480
gtatcccatt ccatttttac tgatgccagt aagttcccag gcactnactt aatggctgtt 540
ttannantgg ttaaattccc ccanaaaaa aaaaaaaaat cgnaaaaaac nggggtttat 600
tgaattgccaa aaa 613

<210> 8862

<211> 160

<212> DNA

<213> Homo sapiens

<400> 8862

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ggcgggggga ggggggaaca gagcctcgct ccgtcatcca ggctgcagtg cagtggcgtg   60
atgtcggctc actgcaacct ctgcctcctg ggttcatgca gttctcctgc ctcagcctcn  120
cgagtaacta gnactacang catgcnan cattccccacn                               160
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<210> 8863

<211> 585

<212> DNA

<213> Homo sapiens

<400> 8863

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gttctctgac aggtttatta gctttcatgt taatggatgt ttttaaacc tgcaaccctc   60
tgtcaacttc tttccacatc aagaggccat ganatacagt aatggcctct taagantcat  120
gccacataaa gatgatgact ttgatgtcct ggcctgcctc ctgtaacaat gtgaggctgt  180
tttgggcaca tgctgtaata acaacaggac tatcacagga acaatgaagc aganaagcag  240
aaggtgccta caaagtttta cctaaatgtc ttgtttgtca ggatggagct gatgcgcca  300
tactggcaga acaattagca cagagtagtt ctgaaaagga ggaagaattc acagagcatc  360
agttatgggt gcaggaagt cgccatctgc caatgggcac canantgtca ctgtactgga  420
aggggaaaaa gaatgggctg gatnaaatcc aagggcctct ctgcccattg tcaaagtcag  480
taactgctct gcctgccggc tcacaatgca tgccnanttt taatnacnc ccccaaaaat  540
ggggtnatc ancttactta gtcccncaac ttcaaggaac ggta                               585
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<210> 8864

<211> 495

<212> DNA

<213> Homo sapiens

<400> 8864

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ctgattcaca cgaataactaa cgtttaatcc tgttttcaaa gtccaagatt gaaaacttgc   60
aattaaacac tgagcaagcc acatgtttta gtaatatattc ttaaaaagtc ttaaagaaaa  120
aagtatgata caggacctaa gttttcagtg gcatatatac tattaacaca tgttctgaaa  180
tctggtaggt cacatcagtc ctgaattaac ttttaataat aataataata aaaaaactaa  240
ctgagcttta tactttttct atgccactat agctttcttt cacctcattt tttaaatgtc  300
gatcttcact ttatgccgtt ctcagtattc ttccaaaaat cttcgaacag tagtcctaca  360
acgcaaagtt tggggaaaaa tgataattag acaacatgtn taaggccaat ttttatgana  420
aagtgttngn ccagtcacta actggctaata naacatgttt tcatggaatg cttgtntcct  480
ttttaattat caang                                                         495

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<210> 8865

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8865

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cttttttgag atggagtctc cctctgtcac caggctggag tgcagtggcg tgatctcggc   60
tcaactgcaac ctccacctcc ctggttcaag cgattctcca gcctcagcct cctgagtagc  120
tgggactgca ggcgtgcact accacgcccga gctaattttt gcagtttttc agtanagacg  180
gggtttcacc atgttggcca ggatggtctc gaactctcaa cctcataatc cgcctgcctt  240
ggcccccaa agtgctggga ttacaggcgt gagccaccgc acctggccca gatttttata  300
taactgattg gcactcaata ttacttgctg acagtttctt ctcccttctt aatatgagca  360
ttgtatataa ctggaattaa tattcattct caaagcatat atgctacaaa tggcaanaaa  420
ttacaaactt gtaaatagcc acctatctca aaaactgtta acttgtggca antaaaaaaa  480
ttaccgcgtt catttgggtt ttaatccatt tagtcagcac attttcatca ancacctact  540
atntnttngg caagcattgt nanaaa                                                         566

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<210> 8866

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8866

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gtggaatgct cacagcctct tcagtgtttt cgatcccaac aaccagcaca taaacatctt   60
tcaatgtatg attaatgtta agcatatttc cttaactgaa aaagaggcta aataatcaca  120
ttggctaaca ttttagcagg taataacccc atgcttgtaa gcactttaca tgaattaact  180
cacttaaagt cagagcaact ctatgaagta ggtacttttt tttatagtca tagagagggt  240
aagtaacttg tccaaagtaa tacagagtat tacctgggaa ctagaatttg aattgagaga  300
gtgttattaa tctgtgcaat taaccactac accatacctc agcaaaaaat atctactgta  360
ttaagcctgg aatagaagac acaatcaata aaatttanca tgagggaagg ggcaagatgg  420
ccgactagag gcagccagat agacagggat gactggccac ttctaaaagt ctccaaaagg  480
aaggccnttg aaanacccaa ccncttctcc atngcattgc tctctcctga cttgggttagg  540
anccncctat taaanacctt cc                                           562
```

<210> 8867

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8867

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ctataaagct attttctaaa acaatttggt aaggagagta acattgtttt atagttctac  120
aaatctcttt aatgttttagc ttgatagaag gcagctgaat taccatacct gcttctgcat  180
tcaacttgct gcaatacatg ttgtaaaacc tggctccaca caggtagata tttggaaaaa  240
gaggggtatt taatagcttt ttcagatgat agtgtgcttt tatattatac caaacattga  300
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tgaagtagtt gaaggatact ggttcttagt caattctcat aaaaattatc tcttaaaact 360
atgacattat tggagcacia taccaaaaac taatcaggtc tctgtaccat ggttcttaca 420
aatttaagat gagccttcta gaagccggag tcatattccc ttactttcct gcccaaagca 480
ccattcctgt ttcttcccca aggttcagct acagggcaca aaaaaaaaaat ntccggccnc 540
catgaacttg cttattaaaa atcccgttg gtaaagggtt 579

<210> 8868

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8868

gttgagcagc caaaaagtca tggtttatta tatctgaana aatttcataa ttcaaacaca 60
accaaactgt acattttaca atcacattct atttgtaaac agttaaaagc cactgacttc 120
ttttgcatct taggacacaa acagttagaa tcaaggcaat gatatgatgg caaattctgt 180
actgttaaaa tttttaccct tgtttagtct ctcttctttg actaagcaag cattataata 240
ccatttgtgg gcaaaaaaag gggggaggaa anaaagttta aaatggtgta actcgttagt 300
ttgcaacaac attttaaatt ttctttatac aacaaacaac tctgtaagcc caataccttg 360
gttacagtat gcatagttac tgatttcggc tttaaggtag aacagttaaa cattaacaca 420
gtcacgagag ancagaaaca tatggagcca cttgatggga ttacaaaaaa ttattaccta 480
ttgattatta acaaaccacn tcnctcncta ataaaaaaaa nanctctgaa acnaaatnt 539

<210> 8869

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8869

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tgaaccattt gccggtgtaa actcatgtct aaaatgcttg ttagaattga gacaggggtca 120
 gtgtttacac acagcccttc attatattta gagataaaac ctatttcttg ttcttgcatt 180
 cacattaagt catgatgtaa gaatataccta ctiggttcct tcagagaatt ctigaaaagt 240
 tcgatttaca gaagactgct atcatggatg ttctttaact cctcagancg gcggcagcgc 300
 anggtggcgg gcgantaagc ccatctccca ncagcggcga cagcagcctc tttctgtaca 360
 tctgcttgta cttccaacct gttaaaacag ttaccatgg cacttcctga cagactcccc 420
 gttatactgg ctccagctaa tgccatgggtg ctgggcgttt cactcnagtt gtctccgant 480
 gntccnattc catcnagttg nttccncttg g 511

<210> 8870

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8870

atggaacaag aattcaattt attctctatt tataaaacat ttttttaaag tgccttgggt 60
 atgaaaatct aaatgtctgc ggtgtgatca gtcaggagca cgtaactatc actcttcgca 120
 tcctttggtc actggganat cctttggggg ctgggaggtc cttctgtccc atgctaaagg 180
 aaaagcttca caagggtann agccacanaa ccctcngcaa gaaaggccgg tcaggganaa 240
 tgaatggtac anaaaggaaa ggaaggaaag ggggtggaac acaggtanaa ggcaaggaag 300
 ggatgccgca ctggagaccg atggggacac tctaattgtg caagaaggag gaccttcctt 360
 cttgaatgct gaacacagct agtctgaact tccttggaaa ntccanctgt ttgcccatgc 420
 atanggccaa ctctccctgc aaagcaacaa atgtggcttc tatcnggaan gaaaantatc 480
 catcantgt 489

<210> 8871

<211> 586

<212> DNA

<213> Homo sapiens

<400> 8871

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aacattcaga agtagagttt aattagctgc taattagcac aggaatcgtg gaacaggtaa   60
ctcaaaattt acattactta gaacaagaaa aaagtcagaa taatgcagtc ttcatttgtg  120
aagcttacia tcttctcaga ttagagtgc cagatctggg aatattttct gttagaaata  180
cagaggaaga taaaagaact tgcagtagac catgccactg aagagtaaac agaaagcaca  240
gagaaagaat ttatagcttt aagtattttc ttcacaagta tatgaaattt atgaatgaga  300
tatggtataa tcataaatac ctgtgcaatg ttatcatgtt ctcgactata aaatggctgt  360
gtattttcat tataagcaag caaaacatgt gacttcagcc tttctcaaga ttttagataa  420
actatattta agctcacatt aaataccata gctagtttta agatacccat ttcttttttt  480
ctaaataaat atgttgttca ggggtttttt gaaattcctg aagtnaaten cncccaagtt  540
ggtgagccat ttttatactt tataccnagg gtttaataa aataac                    586

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<210> 8872

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8872

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ccaagacaga gtctcactct gtcacccagg ctggagtgc gtggcacgat ctcagctcac   60
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actacaggca tgtaccacca ccccggttaa tttttgtatt tttagtagag acagggtttt  180
gccagtttg ccaggctggt ctggaacttg tgacctcagg tgatctgccc gccttggcct  240
cccaaagtgc tgggattaca ggcgtgagcc accatgcctg gcccaaagga aattcttata  300
ggcacagtta ttgacctaa tgtcttaaaa ttatcttgct taggtgcgaa ccagaaggaa  360
actaaggcta aaaccaaatt acaaattcaa attccatgat tcaaatttaa aataggagat  420
agccatccaa atgagatgag agaattgatt ctgagagcgg gagagactca tacccttcac  480
atctgggaac tgccangccc anaaganggc ctanctgnac ccaggctttg gcctttccan  540
ggggattttt aa                                                         552

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<210> 8873

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8873

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cagtagatca gcacttattt taattactga gatagagtca cacttgacag aagcaagccc 60
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tttacttaaa catttaaggc ttgagtttcc tctgtacagt gtggaggtga ttaagaaaat 180
taatcctaac atgaagattt ttcattccagt taaaaaaga aatactttaa aaacgacctg 240
cccttccaaa acatgaagtt aacttggagt ttttctgtga tatgacaaac taggcataat 300
cctatctcgg aattgttgag tagaaaattt atgtactaat actcctgtta aaattcaaca 360
gctttattgt gaaagaatcc agagatctca cactgaaaaa aatactaaca cagctcatat 420
ataaattact tatctataag gaacaattat agaaggaatc taaatggggc aattttaaca 480
aaccaggcaa aatatccent ttcctgaatn taagggactc caagnentgg agtttttagat 540
tnangn 546
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<210> 8874

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8874

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ggattttttt gtgctttaat gttcgcagtc acacgaaagt ggcatctcca tcagcactgg 60
ggcggccgcc tctcatcag ccgacagctg caggtcccc gcctctcacc catttggtct 120
gtttgcaagt tactagatca tacaaaaaat aaccgctaca aattctctgt atctggcata 180
taaaaactga gcaaaaagta tctcttaaag caaacatct cagaaaaaat acaacacagg 240
tttaacttct gcagtacttt gttcatataa aacactagta aaataggctt cttaaaaatt 300
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aaatagtga ataccaacca aattatatac attgttacag tacaagtga tgaggcaaaa 360
tatccagttc ttagtttccc aggtgggtgg ggggtggcctt cagtgcgtgg cacggagggg 420
gtgacaggaa ggccacgttc cgatgtcaca gtcagcgcan aaagaagctt tgcnacnggc 480
naaccgnttg gaannac 497

<210> 8875

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8875

cctcagtcag atttcacttt attgtatcg atgataatat taactcttca gatttataaa 60
atgacaaaac ttgataatta cctggaaaca atttattatt aactaggtta accctaaatc 120
catcaagaaa aaccacctaa catattcagt gttaaaaaga gacattacga ctagcctggc 180
caatatggca aaaccctgtc tctactaaaa atacaaattt tagcagggtta tagtggtacg 240
tgcctgtaag tcccagctac tcagaggcta aggcaccaga atcgcttgaa tctgggaggc 300
agaggttcaa gcgattcccc cgcctcagcc tcccagtag ctgggatcac aggcattgcaa 360
caccacgctc ggctagtttt ttatatcttt agtagagatg ggggtttcac catgttggcc 420
aggctggtct tgaactcctg cctcatgac cgntagcctn cgctnccaaa gtgctgggat 480
tacngngtg gcccgttnn 499

<210> 8876

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8876

gacaaggctc cattctgtcg ctcatgctgg ggtgcagtgg cgcaatctca gttcactgca 60
gaggttttta ataccatta gtgaaactag aagatcaggc tttagtctca gctggcccac 120

tgactttctg tatgaccctc aaccagcccc tgccccctctc tggtttccta tctataaaac 180
 agtaggttta agccagctag gtaatgaggg ccagagaatc ccattaatcc cccaacacac 240
 caggctgaga ggaaagagca gaaagttttc gtgttctggg ctgggggacc ttttgggagg 300
 tctcactccc agcagctcca ctccctcgtc ctgctcctcc gagctctggg ccagggtcct 360
 cttccgagcc ccagccatgg ganaggatct naggggtccc ctctggaagg gctggagcag 420
 ntaaccnggg gtcactcccc cagcggggta ncagggaggg ctcaanggct tgaagtgaca 480
 aggccatggn aacttcgaca cggggcccgg ggacagnccc caaaggtnntt gggnagncct 540
 gggtact 548

<210> 8877

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8877

gagatttaaa accagattta aaaccatcag ctcccaggag tgtggcctcc tccacctgct 60
 cccaacttt tctggttcca aaggttcaag ccaggctcaa ctcccactcc tctagtctcc 120
 aaataagcgt agcacggaga gtctgagtga caatccactt taataatcca gcttcagctc 180
 agctgagaac ttccccctctc aggtgcaaag ggatggcaga gaagtctttc caagagggt 240
 caatccacta agagattatg gcttagagaa gggaacagct caaagaagcc cttgaagagg 300
 gtgagggtct ggaggactcc tgtggtgcag gccatctccc ggatagagtg catggccagt 360
 tgggggctgc ctaaattccag caccgccaa gccagccga gaaccnagat aggtccaatg 420
 gtgggtncac anggggtgtc atttcngacc atgagatcct gcanggggga ccttgctttt 480
 gtnggccctt tttggatcaa gggccttga ccccgngttt ggaagcttan cgtnccttgn 540
 ctgt 544

<210> 8878

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8878

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cctgggacag agtttcgctt tcgttgcca ggctggagt caatggcgcg atctcggtc 60
accccaacct ctgcctccc ggttcaagcg gttctcctgt ctcaggagag ttgtcttaa 120
ctacaattaa catcagttct gatatcagaa ttatctaagg acaccatctt atacctacct 180
ggtcattaac tgaaatttct ctctatagct tcatcattag acattaaaat tcctcatgct 240
taggctcagt gcatttacat ttcaaagaag acatcctatt tgcattacag aacaagcctt 300
gcacaatttg caagtgcac atctgttttc agatttcttt cctgnctaata attctgggtt 360
aacttagctg gaacatcttt gggtaanatg tgctgctggc anggaaacac aagctttttt 420
anggcaatgg ntctcaatt tttccaaaa actccagtat tgnactggca nccnggataa 480
taaaatttct taaagggaat aatngccaaa aaaatatatt tccnggatta cctggttaac 540
caaaaatgga tgatagggtt ttacnctgn ggcaatga 578
```

<210> 8879

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8879

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gcatagaaca agattttgtt ttcagagttt tcttccttcc ccttccccca attgttagca 60
gcttgatgtg tcattctccc cagcagggga gggggtggaa tggcttgggt tgtaaacctc 120
ctccccagc ctctctgtcc ctggagggg cagttcagct gggttctggt tcagggtcag 180
gcaggcagtt aaggctggac ggggtgtgcc cgtaacaatg tgcctcatgg cctgcagctg 240
ctctgggttt gactccagac tccggtcgta cagcttgagt ttcacatctg agggcagcag 300
cgggacgtcc cgaggtgcc caggaaagag catgggccac agcagccagc cgccctgtca 360
gctccagggc acggtgcttg gactcgcaac ggctggcggt tgaaggtaaa gttcaccttg 420
aaaggtcaac ccattccaaa agcggntcan gangctcatg gaaaagctca acttgacacc 480
ggnccaattc accttgcccc aaaggcccct atttttgaan ggggncctcc gggggggnntt 540
```

cccaggacaa aanggccaac aagtggcccc cct

573

<210> 8880

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8880

ccatcacact gaacaagcat ttattccag ggattcccaa catgtgagca ggggtggaagc 60
 cntgacaag gngggccana acctttgat ttggtttggg ggccaaaatc aactaaggct 120
 canagaacat acaaagcctg cgtgaagggtg gtgagctgct cccaccttca caggtnctggg 180
 ggtcctaaac ccttgagacc atggtcagtc ctgtgcccga gcctnttntt ttgcaggccc 240
 tgaaactttc actacagntc anacactgnt gcacgggccc gggagggaag ggggtgcttc 300
 cgggnaactg ttcacagccc cttaacttan cctccctggn gaccanggca ca 352

<210> 8881

<211> 453

<212> DNA

<213> Homo sapiens

<400> 8881

aataaacata agagtgggtt tattgattac atacaatttt agctatatta atatataatta 60
 taaactttta gaattagaaa taagtactt ttatttttta accaagaata atctaagtta 120
 tggcagcatg ttcaatgaaa ggtaagtccg gcacaatttt tctatatctg tttctcagat 180
 aatcaggaac atcatccaag ctttacatta cgataccata atgacctna gaacacaagt 240
 tccattaagt agaaatgaag catcatatgt tttctttttt aggaaagacc cccccttttg 300
 ttgtatagac atacccttaa taatcttact ctactgtaca aataactttt caccacaag 360
 agctgcctca agtaactttc attttgaaa gctatcaagg cntgagacag agtancaaaa 420
 tgccactntg gactttgnat nttggngntt caa 453

<210> 8882

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8882

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aggttgaatg aatgatit atgttccatg tttatgtaag cacttaactt ctttaaaaag   60
aaactagttc tttcaaaaag agctctgaat tctgtctctg gttagaaagt gtgaacaatt  120
ctcagaactt gggacatgat ttttcttctc tctcacttct tataagcaga tgcccccttt  180
cagggcattt tcaggttgca caggcagaac taagtgagaa atacggctcc agaggccatt  240
cagtttgtct ggggtccatat gattgtagga gttgggtgtg ttagaattgg tgaacttgac  300
tttaagaaaa tctcttactt tttcttcaac ttcctttagg cctagacttg ttccaagtgt  360
ctcttctcc aataagacag tcaggactaa ggctacatct ttgaaggccg cgttttcatg  420
gtcacaatat ttgtagaaga tcaaagtaga gcctgagctt ancactgaan ggtgcttatt  480
atgagctggg aaagttttga cctttngan gactggccaa anggatctat ttantggctn  540

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<210> 8883

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8883

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cttggcaagc attcatttat tcacataaca taagccagac actatgccag gggctggcga   60
tacagaaatg agtaagacat gatccctggc cctcccatc cctggaatgt ctactaggaa  120
gaagctgcta gaaaaagaca acatgctact ttaaagccaa gaggggccag tctccattc  180
cagcttggtta cacactgaac acatttgagg cttatgactg gttcttttac ttacaaatat  240
tgtttagaca cattttcaaa tgtcacacca atcaataata ataaggaatg gattttatct  300
atattgacag ttctttcaac cttaagagtg aactgctaca ggtaagattc aatcacattt  360

```

ttcaggagaa agctattgag accaatatgc tttggttata taataagggt gggaatgact 420
 tataatggct atttactcca ggcaaagaga aaaatncaac agaacntagg atcttggatt 480
 tcaacgtagt tctctccat gggcatttct ttggccgtta aggtcaatgc caactgggcc 540
 cccagtgaac atgtcccccg gncctg 566

<210> 8884

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8884

gaagatcaca ggggctttta taataaaata aacataaaca acactcgaat ctctttataa 60
 atcccagagc acaatgtgcg ttttcttact tccttttcat ggaccccaaa taaagacttt 120
 gacagccaga tatccaagat ccggatcagc cagcttccta aaattctcct cttttttttt 180
 aaggggtaga aaactggggg tatcccttgg tggttagggg ttgcttagag actgtggttag 240
 agatttggtg ttaacaaaaa tgtattttga aagcaggatt tcaattttct tatattgaat 300
 ggcaaagggt ccatgcacct ggctatcttc atttctgaaa tgaatgcttt cattttattc 360
 tctccagcta ctttctccct ttctttcctt tccaccccca ttgcctcctt tcagtggctt 420
 tctttttctc cttattcttt cactccttc tctctcacag caaaatgttc tggaggatgt 480
 nantgntnaa acngntanct cc 502

<210> 8885

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8885

ggagttaaac tgtgctaaat tacagtagtg cttattagta actagatttc aaaaggttac 60
 agaaaattta cattctctac acaaaaactg catctcctgc acagacaaca tcgacatcga 120

cacaggaagg aaactgattg tccattcttt gccaggaag tctcggtact ttatagattc 180
 gtctttacct cttttttgtt gttgttcttc cgaaaaagca gtttaaattt ttttcttttt 240
 ctttttatgc tagggacgtg gagatgttaa aacgacaaca aaaaatatat ataaaaacag 300
 gaatgaaatc tgtgagagaa tatttttggg tctaaagacg ggtgcattcc gtttgtcttc 360
 gcccgaaatc cttgctggag accacacgag cagtgcatt gcacggagag gggcagcttt 420
 tgggttccgc cgccgtcact gaaaccaccg gaaggcgggt cccgtcggaa gcatnacctt 480
 ntcagaaca ncggaaggct tctttttggg ttcctcacat ttctgaattt gcaaactctga 540
 tggccagctt tnnatccn 558

<210> 8886

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8886

gagacggagt ttcactcttg ttgccaggc tggagtgcag tggccgtgat ctcggctcac 60
 tgcaacctcc gcctctcagg ttcaggtgat tctcctgcct cagcctccca agtagctggg 120
 actacaggtg cctgccacca ctcttggtta attttttgta ttttagtag agacgaagtt 180
 tcactatatt ggccaggctg ctggtctcga actcctgacc tcgtgatctg cccgcctcgg 240
 cctcccaaag tgctgggatt acaggcatga gccaccacgc ccagcccctg caagcagttt 300
 ctttaactct gttgggatgc cattcgtggg caaagctaga tttgggacaa gttgccacgc 360
 tctgctagga agagtcagtc ctgaggggga aagtttcttt tcaccttcgg gatcccaagg 420
 cttntgggtg tgactcaagg atttatcgca ncctggatct ncangaaatn cctttgggcc 480
 tcttggtcng gccaggttgg ggctnggtg 509

<210> 8887

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8887

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gcagattaga aaatttttaa tagttgattt gaaatgtatt cattcactca ttacattgng 60
ttgcanaaat acctgtcttt caccatgctt ggttcttcat acttacaata cagtttgtaa 120
gtggagggtta ggagtagctg agcaatctgg tagagagcag catgtggcac acagagtga 180
caaactgaca gttggaactc ctgactttct ccattgcttc ctcagaagca aaatccttca 240
ccatgtgata taaagtagaa tgaaactcag tttcttcttt aagngcttca naaaatgcct 300
cactctcttc cttgatcttc agtctttgtg ctctgtcacc actaaacatt aaaagggtccc 360
aattaggatt ctgagtacat tcttcaataa ggggttccct taccttaaat accacttttg 420
nagaattacn tagtagggtc ccttggttcc anccaatgca aaagccgaac cttattnggg 480
ccatnttgnc gaaaagcctt tacttttacc caagggancc ttattgtttt 530
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<210> 8888

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8888

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ctgagacagg gtctcactcc atcactcgct ggagtgcagt ggctcactgc agcctcgacc 60
tcccagactc aagcaatcct cccgccttag cctcctgagc agctgggact atgagtgcac 120
gccagcacat ccagctaatt tttaaatttt aatgtagaga cgaggctctg ctatgttacc 180
caggccagtc tcggactcct gggctcaagc aatcctcctg ctttggcctc ccgaagtgct 240
ggggtgacag gaattaacat ttttgattta acttttgttt tggcagattc caaactaaag 300
acaacatggt ctgacatcaa gaagtgccca ggccttccct acagggaaga attctgtgga 360
aactatgttc aaagaaaatc aagcctaaga gattacaggt ttcaacagac tggccttcac 420
ttctactagt tcaagaattg aatcctgtgg aaaaggacag ttiantgata tgggggaaat 480
ggaatncncc taaatggaaa agcctttntt ggaaaaaatt taaattntaa agtccaaatt 540
cn 542
```

<210> 8889

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8889

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gtgggtaaga tagtaggtgt atatatttat gggatacttt gatacaggta tgcaatgcat    60
aataatcaca gggtaaaggg ggtatccatc ccctcaagca tttattcttt gtgttacaaa   120
caatgcaatt atgctcttta tttttaaatt gaggctggac acggtagctc acccatgtaa   180
ttccagcact ttgggtggct aaggcaagcg tattgcttgt gctcaggagt ttgagaccag   240
cctgggcaat gagacaaaac cccgtctcta caaaaaaata caaaaaaatt agcctgggtgt   300
ggtggcacac accccgcggn cccagctact cgggaaggct gangcaggag aatcacccga   360
accaggaag ccggangttg cagtgagcca agatcacgcc attgcattnc ancctgggca   420
acaagcgcga aacttcatct taagaaccaa aaaaaatctt gcaaattctgc caatcgcaca   480
tgggtaccct atcttctctt ggttnataag gccctgggac ttcctttgga ata          533
```

<210> 8890

<211> 382

<212> DNA

<213> Homo sapiens

<400> 8890

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aaatgatatt ttctttatTT taaatccaga gaatgattta acttaagaaa aagttctaga    60
catgaaaaaa gaataaaata gttaagggat aagcagaaca caaggcaaaa aataacatca   120
aaacttcaat ggctaatatg aaggctctgt attaaaaaca aaacaacaaa aaacggtaaa   180
atTTtatcaa gagacataag taaaacgaca aacataacag tccctaaaca ggaagacaca   240
gtgctgttaa aatgacaatt atgtttcagt tatcaattga atgcaatttc aaacaaaaaac   300
caagcttagt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt   360
tttttttttt ntntntnnnt nn                                382
```

<210> 8891

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8891

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gaggagagct tttctacttt attacaaaga gaagaagcct ttatgtggtc agaaaataca 60
agattgatct ttttttctct tcctatgaaa cgctgctgtt caaacagcca gagtgaattg 120
tctcagttca cttcttttaa gtcccatcac attcacttgg gtatggatgt ccttggctgc 180
tgaaaatctg gcccttttag tgcacagggc gacaaagtcc cctgaccagc agttccagaa 240
tgtcccatTT tcatatattg catccatgca cacctcctaa aaatgaggta cagcagggca 300
aacattttcc aaaatagatg tcatatatat aatatataca cattccgtac atacatacct 360
ttattcatgt gatgtccaaa aatttaaaaa aaatgtccac gtttattaca aaatcgtagc 420
aagactggac aggtgggttg ctcatctctg aaaggatgaa gctcaantaa taccctaaacc 480
ctgggaaaac catccagaga attgnnggca atatctttct ttttaaccag gcaggatatt 540
cttgcatata gt 552
```

<210> 8892

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8892

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aactttatca tttataaagc catacaatgc attgcaaaga aacaaagcag ctgtacagga 60
gtggggacnc gtcagtgtac aatacattca tgtccaggat aaggngcata cncaggatt 120
tatacncggg ggcagcggct ataggcacga tgatacaaaa tataaagtat atttccatct 180
atataaatac ncagaaagcg tgtgttccac gtggttgggg gtggccgaca gtgtaggacg 240
tgtggcatta acagccccgg tgctgccgtg caggagagtct ttcttcttca ccttagcata 300
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caggctccca tntagnggcc cctgcgtgtg tcccaccacc tntccatgc cgtcatctcg 360
atgcccactg aagttgtcgt aggagtccca gcggatgaag ggggtcanna ggtgttatag 420
tccacaagac acgcttgggc ccgttttcca agngcttcat gccttgaatt ttctttgggc 480
ccttaagaaa aatccaactt ccactttggc catacttttg gga 523

<210> 8893

<211> 471

<212> DNA

<213> Homo sapiens

<400> 8893

gtcgttttat tctataatit ttaattagt acgttaaaca tctttcctat cggccatttt 60
acatattttt tccttatgag ttgccttcac ttatcttcag caaaattatc tattgagata 120
tctttttttt cctgtaatit ggaagtgtc ttgatatgct gaaatgtctg cactgccaca 180
ttttgcccta ttgtttcttc agtttgcggt ttgcttgcag ttgtgcttat ggcgttcact 240
gtatggaagt gttgtttgtc catcaaaagc aaatctattg agtctttttt cttcatggct 300
cctgccttcg gtcataaact cttacaggta ctacaatgaa cactcgccac tgttggttacc 360
atggtgcaga tgtcttctgn atccttcag aaaaccattt gaggagtgc cttttgcaaa 420
atgtgccann tcttgncaaa gttttccagc tgccaggnaa aaaggtcctn a 471

<210> 8894

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8894

gagatgaagt ttcactcttg ttgccaggc tgaagcacag tggcacgac tcactgcaac 60
ctccgcctcc caggttcaag tgattctccc gcttcagcct cctgagtagc tgggattaca 120
ggtgcacgcc accacgcccg gctaattttc gtagtttttag taaagacagg gtttcacat 180

gttgccagg ctggtcttga actcctgacc tcaggtgatc caccgcctt ggcctcccaa 240
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 tccttttagg attggtacca cagggaaca cagcttttca aagcgcctta cggggaagac 420
 tgagcctgga atcttgacca atttgtnngg caaancctta aggaaccctg gcccaanccn 480
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<210> 8895

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8895

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 cagcccaggg gacctgggac aagagctgct ctgtcctgct tgggtggctct cagaggagag 180
 ccttgggggc tctgagcagc aggtacaccg tcctcccctc ctgccagcct ggttctgccc 240
 tctactggaag agtnaaccct gccagcagcg cccacagccc cagccccacg tccaggctgc 300
 catgtcccgg cgggcagtgc ccaggcccag ttgtattttt tagcanactg gntgcactat 360
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<210> 8896

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8896

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aggggcagga ggctacctgg ccctgtcccc aacccctgag acaggaaggt cactgtcagg 180
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 aagggccggg gacaaggag ctctgggaac ccttgccctg gcctaagggg tggggccagc 360
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 nanag 425

<210> 8897

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8897

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 attttgtcca tctgaaaaaa ttttctacat ccactgttaa tacggaatgc ttgacaatct 180
 tgtcttttaa ccatcagagc acaattcaca gtatgaatac atttccagta aatctaacct 240
 ccgcaaacca tgccagattt gttattttaa tatattcaac gttaaattct gtacatagag 300
 taaaacctac atcaagcccc accacccaaa agaaaagaaa atgacagcaa tctggattca 360
 ttttgcagtg attcaagttt tggccataaa ggatcattct attttaatgg ctcatcttta 420
 aaaggcctaa agagaaattt gtgacangga gntactgnca ntaggatata tttctaacct 480
 ttttttccca atggngnaaa ng 502

<210> 8898

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8898

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 cctctgatcc agctgcagcc tcccataana agttcacnt taatttcag tcccatgctt 180
 tgtcttggtc cctgtgagga aaggggtcag ctaaaggcaa ctgttctata aggatgggta 240
 ggtatcctgg caagatattt cctntgaaat agtaaactg accttanaag ttactgtcta 300
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<210> 8899

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8899

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 tgtgatctgg cgtgggtgtca caggaggtct ggggacagca gcaaagacct ggaccggtgg 180
 aggtggatga gggaagcgat ctgccagccc ttccagcctc ccgcggctgg ggcctgagga 240
 tcctgcctgc ctttgggggc cactggttgc ctggcctggc tggttccagg aatgaactgg 300
 gagaggacag gaggtgcagg gctagagttg agaatgaaac tagggtgctg ttgcccccaa 360
 aggtaccttc agtccctnta ccacatccan ttagaaagtc ttgacccttg gacaggcana 420
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<210> 8900

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8900

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ttaatcctaa acattacagg gtaaatagat actggaccct atctccatac tccataaaat 120
 cctaactttt agtttccatt tcaaatgttg ctgtaaccac taaaacacta gtggtttttac 180
 aacctctgga ttatggaaat acacatttct gaaataaatg ctacaaaaac aacaatggaa 240
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 gtaatgggcc ccatggtgaa caaacatcta actagtgtcc attgattcca agttagtaga 420
 tgatgaatct ttctggatac tttcaaaaga taccgcagc tcangggtag gactggactg 480
 ggactggnat tcctcatcag tggactcttc tctgnttctg gnaagggtag ccatgctggt 540
 accggnct 548

<210> 8901

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8901

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 caaaaagaat atgcttttct gatggggaag tgacaaaaaa aaaaactaca cagaacaaga 120
 gtaataaagt tctcaagtaa ggattgcact ccaataggaa ttgagtatt ctctcagaga 180
 gcactcatta catcttagac aacgtcactc ttctttcctc ttggccatat gttcaggtct 240
 catagtcttt ctgaacacag aatggcagtg gccagcattg tccattatct atgttccgct 300
 tgtttactaa ttaaaaagct ttgggtctca gtgttgtaaa cgcaatttct gccttcgata 360
 tcaaaaagtg agtgaatgag acaagattag ttgaaggaag tacttgatat ttactccag 420
 atagctgaat gaaaatgggt attctccctt ggctttggag gccatcggtt cctactccca 480
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<210> 8902

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8902

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agaaccacag tgggtgctca tcagcacggt gccctcagaa ccacatgggc tacccttgat 180
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atgtgcacat taccttacct actcacaaca ttgatttca actcaattct gctctagtat 300
tatgtttatt gaatgacgga agtctaacag acactgtaaa aatccaattt cacatcttat 360
agtacccaaa agggaactgt gattttccta tatcagtgag caaaatcttg agccaattag 420
taacaagatc acccaatttc tagtatttct attgagatat atttcttag gtttctgnaa 480
nggggaaata atttttggna ccttagtata agcaatctta tattcattta taggggtatc 540
tcaagt 546
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<210> 8903

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8903

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cgctgcctc ggccctccaa agtgctggga ttacaggcgt gagccaccgc gcccggccag 120
ctttatcggt tttatcagct aagtttttaa aattgaaagt ccccccaaa ggggcagcat 180
atatgtaa atacctttt atctacctgt acttcttca ctaatatatt aattatcttt 240
ggtccttcct ttgaaggatg aaaaatttaa agctacatgt ttcgtatttt ctttgggcct 300
tctatcttgt gcctttcttg tttttggtga tttttttaga aaaagatatt taaaatggtc 360
attatcaagt actgtgggct cctaagagg aggaagggan gtaattgna cccaatgggt 420
acnttanagt ggaaggggaa aaaagctggg ggaaagtggc ttggagacc ttcttcaca 480
nganggccct gtgggccaaa ccactaagct ngggtanaac ctgantcttg atccactggg 540
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nntgg

545

<210> 8904

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8904

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cttgagacgg agtcttgctc tgtcaccag gatggagtgc agtggcacga tgtcggctca 60
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gactacaggc gcccgccacc gctcccggct aatTTTTTat atttttagta gagacggggt 180
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gggattacag gcgtgagcca ccacgccag cctaattggt ctatagttct atccatttca 300
gtgtataaca ctgtttggtg agtgcaattg gataaaaaga aggaggagta ttttaaggtag 360
ggaataaaag agatggcaaa tcattgactt ggtgtggcct tagatagcat taattaatgn 420
ttatctcgac cgtttgtgga agctcctaataa gggtttataa aagatttgag gatggccaac 480
ttttaaatec atncncaaaa tctttgatac ctttntttt aagngggaan ggttnaattt 540
cctggcnt 548

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<210> 8905

<211> 263

<212> DNA

<213> Homo sapiens

<400> 8905

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caggcatatt agctttaatg taggtggcca tgagttttta ggccaaggaa ggaataatgt 60
ntnatgtacc aaagcctttg gaccatttt ccatcatacg aatagaattc cctgttgcta 120
anccgatgat ncattaccct ttcccatag gtgtgagtgg cggctctgaat ggagaagttc 180
aatagttcng attgcagatc ctatgcanaa gaganaataa ggaaaataac cnnngnctcc 240

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tggattaagc tgaggctggc aaa

263

<210> 8906

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8906

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atcgaattga ccatttgcaa tatttggttt tcctaataagg tactgtctta gtaaattgttt 120
aaatccaaac aaatcttctg ttcaccggga aaataactaat aaaaatacac tttctaaaaa 180
gaaattaaga aacactaggg aacacctaata gtaacagaaa gtagttcacg tttgttaata 240
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tggatgaaaa tataaatgaa acatcagttc actcttggct tcacaggttg cacagcttag 360
gttataatgc acacaagttt tataaggcct aatctaacaa gggcttggaa agtcttacct 420
cagtcagaat gacctttgat ggggttataa cgngtggg ttggttgncc cctcgttca 480
nggataccat ancaccggtg atagtttcng nattggcagg ttttgggaaa an 532

<210> 8907

<211> 343

<212> DNA

<213> Homo sapiens

<400> 8907

cataaaacca tgtttattca aaaaaatcta ttcagaaagt ctggaaagcg taataaatat 60
ctgtacagtg gccaccatc tcaaacaatga attacaaagc aggattgggt gaactgggac 120
tttgtgcaga tcttgctgtg agggctcctg gatcaggctt gaggccacaa agctgaatcc 180
tctaaacagg tctcgatgaa caaccccctg ggaatggagg tagtccatgg tcttggtgat 240
gggtgcacagg gcgtnactgg ctctgcgctc cgagaagaat ctctgccgga ggatncggtc 300

caggagctnc ccancacgca tcagctncat taccaggncn caa

343

<210> 8908

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8908

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tcactgcagc ctccacctcc cagactcaag ggatactcct gcttcgcct cccaagtagc	120
tggaacata ggtgcatgtc accatgcctg gctcgccctg caattctaag ccctctgtgg	180
atggaggtgg gatgggcgca gatccacagc gaccatgaaa tgcccagctt gcaactcaca	240
gtggaaggca ggcactgcag ggacagctca cggggaagaa ctgacacact ttctgtgacc	300
agtgccctgg acatggcccg gagtcacatt ctaagggggg aggggggcac caaccttcan	360
ggctttcanc accccaaccc caaaagggcc ctggangaag gcccgttatg gggggncccn	420
gngaggnc	429

<210> 8909

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8909

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acaccgccct naccncnag cggccattag ggagggggct tatactnttc ctaatgtaga	120
tctggccatc ttataaagca gaccacatta ttgtttcca tatatactg tagatatttc	180
tctccctca aatatttata tctcgactaa aaaaaggagg tgcaaagagt atataaagat	240
aatgagatt ttcttgctgt tggtatagta caaacaccag atgactacca gtggagtaac	300
anggcaaac aaaaacacaa accccacctt cagtgaggaa tggaaggtct gtttaccgac	360

ctcaagtagc tgaatcacct gctgtaactg ggacctnnct gacaatcatg gggttttag 420
 ggacatgggc ccagtggatg ggctttctac ctngttccan aanggttat tngngncctt 480
 acaccccttt 490

<210> 8910

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8910

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 ttacaggtgc acaccaccat gcatggctaa tttttgtatt ttagtagag atggggtttt 180
 gccattttgc ccaggctggg cctgaactcc tgagctcaag caatccacct gctctggcct 240
 cccaaaatgc tgggattata ggcatgagcc actgtgcccgc gcctgtgggc catttttgat 300
 tggcccactc attcccaaag ggcgtgtac ccaggcaaaa tactcatata tgcaactaga 360
 aatactgnct agagtttaca ctcatccta ttcaaaaaaa tttntttta agttcagntg 420
 aaatcattca gggnttcggn ntggcttcta ganggtt 457

<210> 8911

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8911

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 caatgtgcct ggccagtttt taattttttt ttttttttga gccggagtct cgctctgtca 180
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 ggggtgagcc atcgngcccg gccccttttg attcttttacn agaatttgc tgaagataac 480
 ttttttccat gcccttaatt ttngtccctt gtgggcatat tcatttcttc ctgnaaaang 540
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<210> 8912

<211> 486

<212> DNA

<213> Homo sapiens

<400> 8912

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 ctctgcctc agcctcctga gtagctaaga ctacagggtc catccaccac gcccaactaa 180
 ttttttgtat tttttttttt ttagaagaga tagggtttcc ctatgtttac caggttggtc 240
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 agcttt 486

<210> 8913

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8913

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 attggcacc c tgactctcaa actctcatct ccaccaacaa tgtcttactg tttgtaatca 180
 ccaaaattat ctgttttttc cggggttgaa attgtagaaa gcactcaaaa ttaggatcat 240
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 ggttcagaa nctggcnagt ancaactggt ctga 514

<210> 8914

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8914

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 tacaggcgcc tgccacctca cccggccaat tttttgtatt tttagtagag atgggttttc 180
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 ttcggggtaa atnggaatca caggattgg 509

<210> 8915

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8915

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aaagttatat tggctctttt ggttttgttc gcacttccat atgaatttca aatctgcttt 60
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ttttagcaat actgagactt ctgaccttta aacaaagtat atctctccga ttatttaggt 180
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tcttaacctt ctttcttgag ggantnggca taccactccc tntggcaaaa ncctggtngt 540
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<210> 8916

<211> 169

<212> DNA

<213> Homo sapiens

<400> 8916

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cagaaaataa actgctttat tggaattaca ggagtgttgg tggccggtgg gcagagccta 60
gcaggggggtg cagccgcaa ggcccgggtg tcccagctgt tgctcaggag ccgtgggccc 120
tgcaggagta tggggaggat atgatgtgtg gggagcaggg ggnnnnnnn 169

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<210> 8917

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8917

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aaattttaa gcttttatta acaatcttct tacattacaa ggataaatatg acaaaaagaa 60
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tcccgtcaca caggtactat aaagcgtagt ctgcaaaata ataacatcaa gaggtttttt 180
ttaaagaaag tattaacata ttaatatgta tgtgataata gactcctagg tatttcccc 240
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atgccccctg ccctggccag aaagncttgt ggatggtggg cagcgtgcc tggcgatgct 480
catgctgncc acatcctttc tctgacagn ggttgancag tgagggaagg cccgnacggt 540
tgcnccttang 550

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<210> 8918

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8918

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gctgctcaag cctcatcgtc ttttcagaa tctgttcaaa tagtgcatag aggtctttat 180
accgtatgct tttcccatca tccatcgcca atgcagatga ataaaagctg aagatattct 240
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cttcattatc taggtcattc acctttttca gaagaaattc atccatgctt tttaaatcac 360
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ttccttccgg gaactgccgg caagtcttgg gcttnaaagg aggtgttggg gngatatgca 540
gctaatacatn n 551

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<210> 8919

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8919

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aaattagcca agcgaggtgg ctcacacctg taatcccagc ttcctgggag tctgaggtgg   60
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ccagcctggg tgacagagtg agacccatt aaaaaaaaaa gaagaagaag aaagaaagaa  180
ctgtttatgg agcttgcaaa atcctcatct tcctacagga cacatacact atactcccca  240
cactcaaacc ctgactcttc catggctggg gctatcctga gtgacactat ttttctcaac  300
aatagaaaat agtttgatta tagtcctat ttcctgactc cggaggagct catccaactg  360
accaggtgg cagcctcagg tgttggcgtc accttctggg tagacatctg ctggacaccg  420
gaagggagtc naagctggca atcttgaagg ccacagtcta caacattttg ggtanaggtg  480
ctcagngatt ttttaaaaat gggaatctga atgcctttta ggcagttttc ctttaagnccc  540
aacacttcta tac                                                         553

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<210> 8920

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8920

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ccgcggttaag gcctgtgctt tattgtgggt caatctcggg ggacgcggng gccagcaggg   60
gcgacgcccc actcttgggt cccagcagca cagtgagcag cagccgnncc accctgagcc  120
gccgnacaga aacagacacg cgccggcatg cggccaccgc cagcctnagg gccaggagcc  180
cccaaggcga ggagccaccc aggactcgcc tntgaaacgt ccttccagcc gtcgtcgacc  240
gtggtgtctc cacgtggcct ggccagttca gtccagctcg atggggctgc cgtcgnatgg  300
gctctcctcc caatcctcct gntctgagga gcccatgagg ctggtcanaa gggtcccgag  360

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caggccccng tagnannac

379

<210> 8921

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8921

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cttttttttg agacagagac tctgtcgccc agtctggagt gcagtggcgg gatctcagct   60
cactgcaagc tccgcctacc gggctcaagc gattctcccg cctcagcctc ctgagtagct  120
gggattacag aggaaggagt cagtaaactt acaaagagat caatagaaat tatctaactt  180
gaaaaacagg agaaaagatt ttttaaaaaa atgaacaaag cttcagagag ctgtgaaaca  240
atatcaaaac atctatcact tttgtatttg aagtccaga aggggaatgg aaagatatta  300
gtacataaaa catttatattt gaagaaataa tggcagaaaa gttctctaata ttagtgaaag  360
atataaactt atgaaaatca aaaagtttgg ccaactccag atgggataaa ctcaaataca  420
atattttatg tatttatatg tgtaaaattc ctcaccagca gactttattt ctttttttga  480
ganggccnac tttggantgg gccccatga ggtnccccn cnaaccaag ggggcncctc  540
t                                                                 541

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<210> 8922

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8922

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gagacagagt tttgctcttg ttgcccaggc tggagtgcaa tggtgcaatc ttggctgacc   60
acaacctcca cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gtagctggga  120
ttacaggcat gtgccgccac acccggtctaa ttttgtattt ttgtttacca gagatggggt  180
ttctccatgt tggtaagct ggtctcaaac tcctgacctt aggtgatcca tccgcctcgg  240

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cctcccaaag tgctgggatt acaggcgtga gccaccacgc ccagccaaaa gcaagtttac 300
 ctctacgttg aacagaagga gctagcagct ttggctgtgg aacacgggcc atgggaaggg 360
 ttttgtgggg agcactagga aggaagggt gagcagaaac agggcctctc acttctcctg 420
 ggcaaagcgc tgcacttcct gggcgatcct gcgcacagcg gaacccccct gctncttctg 480
 ggccaacacg ggcatnatng cctgggcnaa canggacctg tgcttcccgg ggacaccatt 540
 ttgggaaatn 550

<210> 8923

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8923

aaaggcaaat aaaataagtt tattgggatg taaccccatc ataaattgag gagcatccat 60
 acaggcaagc tataaaatct ggaaaattta aatcaaatta aattctgctt ttaaaaaggt 120
 gccttaagtt aaccaagcat ttgataaca cattcaaatt taatatataa aaatagatgt 180
 atcctggaag atataatgaa gaacatgcca tgtgtacaaa ttcagaatac gctttttaca 240
 caaagaacta caaaaagtta caaagacagc cttcaggaac cacacttagg aaaagtgagc 300
 cgagcagcct tcacgcaaag cctccttcaa agaagtctca caaagactcc agaaccagcc 360
 gagtccgtcc tcggggctcc gtgtctttca acacaccgtg gacaggggag gaaatgggtt 420
 ctgcttgctg accaccagct tntgatgctg atgcgatatg tagccctttg ccgggccccat 480
 gtntntcaag ttagcngaa tacactgaac ttgnnaatg ggccacgtct tcaactggnt 540
 ggaacttnaa ggga 554

<210> 8924

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8924

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cttttttaaa cagtgattta ttgtgtttct taaggtaaaa caacaaaaac aaattctaaa 60
attgtaactt taaattaagt ggttaaaatt tcagatgaca gagccgataa ctggtaacag 120
cttcttgaag ttcataattaa gagtccaatt agaaacacta acaactacct ggcaatagtt 180
tgaaagaatc agaagggttc ggtgaagtga aaaaaaaatc cgaacatgca aaataccccc 240
caaaacacat gaccttcttt ttcattttat aatctaaact tgtaaaatat ttataaatac 300
atgatcattc tacacaatac agatcttcta gagcatttct aaaggatatt atagtttttg 360
gtcttaagga ataaagacta agatggaaaa ggagatgaaa acagtgaaat ctgaggaagc 420
aatacactct ntacacacaa gcaaactagt tcatccagtc aaggttagnc gggttcaggtc 480
agtncaatga tttcaaggca cctaagaaat caggaccgca tntttcccct cctagagtta 540
caattntttc aaaagctcca angtttcctt aanggggggc g 581

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<210> 8925

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8925

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cagatatagg gtcttgctgt gttgcccggc tagagtgcag cggcacaaag ctcaccatgg 60
ccttcaactt cttggctcaa gagatcctcc tacctcagcc acctgggtaa aaagactaca 120
ggcatgtgct actatgcccg gctaattttt tgttattttt tgtagagaca gagtattgct 180
atattgcccc ggatgggtctt gaactcctgg cctcaagcaa tcctcccacc tttgcttccc 240
aaagtgtggt gattacaagc atggtgaggc ccagcatgaa cagaataaag aactcattta 300
atcagaataa acacaattat cctacttacc ttaatcacac tccaatatg gttctgttga 360
attaagagat ctgttagttc tgcagtgttc acagggagcc tttagaaaaa gctaaaagga 420
ggaaaaaatt attttaaaatt aagatcaaag catgattcta atacttcaaa tcctattttc 480
aaatccaanc atgaaattct gnggcttaag atgatgatct agaaaagcaa ccccagangg 540
aaagaaaagc cccggagagt caaat 565

```

<210> 8926

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8926

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agctttgata catgcatata ttttaataatg aaacaattca tcaacagcaa aaagaaagtn   60
gaaaaattcg taagacctca gggctgtgga agagaatggg acatcaagga aaaaagatat   120
atntagcaac caaccanana ggctgcatga tgagtgaagc aaaggcaagt ttggctaana   180
tagtattata tgctctgaaa agagaatggc tggataggta cccacttatg tgactgctta   240
ctagcaggca gccttactgn atgcctcatg gaatggaggc aaaaagccag ggaaagggtg   300
gaggggagaa ggaagagAAC tgtatnaaac ccagggtaaa caaatgagtg gggcagaatt   360
nccgagagag gactctaaag tcttttgntt ccttgaaagt ctaaaatnaa ccttaagggt   420
ttaactatgt cantcaaatt caatggacnc ntaatgngt                               459

```

<210> 8927

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8927

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ataaaacata aataatcatt tatactccat gattagcaat ggatcctgtc tgaagtaaAC   60
aaggacaatt aatacagtac aagatatttg tggttttgtt tttataacc cactaagcca   120
agatttgat ctctgtatgg aactgatttt caaatggaca gaaatggtct ttgatctttc   180
tgaaccactt gtcttcaaat tcttctgagg atacagtcac caaggcagtc agggctacgg   240
agccaacaca cttcacctct gggatgaactt catcttttat ttttctggg atatcttctc   300
ccataacctc agctatcaac agcaaagtgt cttctttgaa gctgaaccct ttcattttat   360
cttcaatttc ctgctgagtc ctttaagttcc tctccaaagc aaacgatgtt tgctgagggt   420
gggtaaactg aagcagaagc ctggttcgta taaaagaggc catgctttag ctgagtctct   480

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atcaacactg nttctctctt ttctgccata cagttttgga tatttgcaaa agcnttctna 540
 ttttctggct atactgntat tcgctttcnn 570

<210> 8928

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8928

gaaatggagt ctactctgt cgcccaggct ggagtgcaac ggcgtgatct cggctcactg 60
 naacctctgc ctcccagggt caagcgattc tctgcctca gcctccagag tagcttctgt 120
 aaggctataa accacagaga ttttcaagta ccactcagtg ttcaggaagc tgaacattaa 180
 ttacaagtgc ttcttgaaag tacaagggtg aggatcttcc tggaagtact attggttaga 240
 taaaatctct cctgggtggca gtgcctctaa tcagagtctg gggaatccaa atgagacgtg 300
 gcaatcaaga ataagtacaa taaaagtcca aaaaggcttc aaaatttcca tctggaggaa 360
 gccaaagtgc ataaggagac tcaaactggg tcaggtacag agaatggtaa aagcagcatt 420
 ctaaacctag ccaagagcca ttgtctgtac actcagccgc aaaatgtgca tnaagactct 480
 gtttggganc tanaaattgt ttcaggccag cccittttaa aggtcccca ggctantggc 540
 attnttttgg cncctngctaa aaa 563

<210> 8929

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8929

gagggaaagg ggagtttatt tctgaggaaa ttcctaaggc acaaggaaaa agcaaggctt 60
 tcaggtaaaa actgatgcca tgggtatcta gttgcatccc ttcttctcaa gactactcag 120
 tatgtatgtg tatgccagca gtttatacta atatttttat ggcttagaat attatctcac 180

tttacagtga aggaggcata gtattcagga ttcacaataa cctaccaaag taaactgtcc 240
aaggagtttg ttgtctccag ccattctctt ttcaccctga cacactttta tttccacttg 300
cgtttgacca tcagcggcag tagagaatac ctagggaaga agaaaccctc ctgggttgtc 360
aatgtgatta acctactcca tttctataga aaaaatgaaa gccaaagggt tacattccaa 420
gactggaaga ctcctaattt accgnatgtt cagaacaaan gctgatgtct ttataggga 480
ttgaagtngg gattantacn gcaaatinggc ctccattcc aactgnttca 530

<210> 8930

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8930

agcaaagcag ctgccactac agattgaatg catctgggcc atctgcgggt tactgggtta 60
aggatttttg ataggaaggc ctcaagtgtt tcgggatacg cccttgttta cactgactac 120
actgacaaca aagtgggtatt agagtgttac agggttacga agaatacctt taattatcaa 180
ttataggttt caaatttacc ttggctttta aaggaatagg gtatactgtt tttttcttaa 240
gtacttgat atttctttct cttttctct ctttgacttt ctgtctctct ctctctgact 300
ttccttttgc ctctgtctct tcctctttct gcctctctct ttctctgtct ctctttctct 360
tttcttgact ccttctttgt ctctctgtct cttcctgtct tttcctctct ttgtctctgc 420
tggcttttcc ttgcctctgc caaccgctt atgctgctgg tctcttaact actggggcng 480
ggaaaggggt ctaaaaacca nctggaactg nctatgangg naactggnet gggtgncttg 540
gg 542

<210> 8931

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8931

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gagctttaca gacttgttca tgtttttgag aacctatggg gatactcatt gggcagaatc 60
agagcccagc agaacacggg gacggggaag ggtaaagagg ggaaaccgac agagtcctga 120
ggatcatcccg ggaggaaggg agactacttc cagaagcagc agcacaaagg gctctgccga 180
gactntgcgg aggggggtcca ggggtactggg ggtggagggg tcccctcttg cagtgtgggg 240
ttactgtttg ggtaaagcga agtcccaggc agtttctgt gcacatttcc acatggcctg 300
catgaggcga gtgaaacca tgtctttggg cttttccagg cctctcatca gccgttgctt 360
catgatggaa acaaattcct tattgtcag ttgccattg ccatcacaag tcaaaagagt 420
gcaaacacca cattacacac ctgggtctga aaactccact ttagcccttg tcctggccac 480
ctgntgcatg ggtcacnttt ntcaananat gctccancct ntggtaaaa cctcaa 536
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<210> 8932

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8932

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gagatggagt ctcactctgc tgcccaggct ggagtgcagt ggcgccatct cggctcactg 60
caacctccgc ctccataggtt caagcgattc tcctgcctca gcctccccag tagctgggggt 120
tacaggcatg cgctaccag cccggctaatt tttgtatatt ttagtagagg tggggtttcg 180
ccatgttggc caggctggtc tcaaaccct gacctcaggt gatctacca cctcagcctc 240
tcaaagtgct aggattacag gcatgagcca ccacgcctga cccactgtac gctttttaca 300
agcagcgtgc ttttcttttt ctttttttta aagacagggt ctcactctgt caccaggct 360
ggagtgcagt ggcatgatca cggctcattg cagcctcaac ttcttggtct caagtgattc 420
tcctgcctca gcctcctgaa tagctgagac cacaggcatg ccccttcaca cctggctaaa 480
tttttaaatt tttgnanaaa tngagtctac tttaatgnnc aggtttggct naaattcn 538
```

<210> 8933

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8933

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ctcacttccc tttttatttc ctctaagact tgcaagcagc agcaccagag agggaaacctg   60
ccctcctggc cctggaaggg gccgaccccc aaccacctaac ccaggacaca gctggcacct   120
caggccccctt tccttctgaa aggagggctg tgtctctctc acattcacac atacacagac   180
acatgcatgt gtgcacactc atggcacatg ggacctcagg ggtagcctgt ttgccgatcc   240
ccccaagagg taccaggagg cagaccgcta gaaggagata agaggcacc ctggtctcctc   300
caaccaagg aggaagaaag ctcaaccct ctaggatagg gactgtcttc agtcaatgga   360
gcgttgactt agggggcggt tttgaaggtt ttttttctc ctttttgcaa gtctttacaa   420
aaatagaact tctcttggtt tttataaatc tacggncatg gctctatgtg cattgtacag   480
gtagaaaagc catatggggc acttcctttg ggtgggttaag gccttgatgg cctgtnatca   540
ggtccttng gcttganaag tctttgcggc acctnaaat                               579
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<210> 8934

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8934

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aaatgggcaa agaacaatca tttattgggt tattttgtct ctactaaaca cattagtcac   60
ttatcattta aataccggac ttcatagaa gccgttgtaa cactttttct ccctcctgcc   120
ataaaaatac agtaagtaat ttgcttaaaa aaaacaacac aacactagga acaagtgttc   180
tggtttcttc tcaactgaact aaagacattt ctcagtgaat tcagtttgta aatcagtaag   240
acagtgcagg ctacaaatca gtgcaggctg aagactgaga ttcaaatgat cttccactta   300
aaagtgctga gctatggaac ctgctctctc tatacctctc catttcctaa catatataca   360
actgaaacca ctgatttata aactattaag tagtgctgaa ttctgtctgc tctattagtt   420
taaataaatg caacttacct ttagcattat attcagaaaa atacttactt aagcctcaan   480
```

ggccccaata atttgagtc ctggactaga taccgccctt agacactttt ggcncagta 540
anccttcctt tagcanggtt ccaaccctg 569

<210> 8935

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8935

gtgttataag atgtgtacac ctcatgggtt tattgtgggtt ttccttaagt tttatcctta 60
ttaggatgaa gttcatgcat ttctacacta ctcttaacta aggctcaaga gacaataaaa 120
acatagaagt aatTTTTTaa taaaaggaaa taaaataatc aagtactctg agtattttcc 180
tccattctct tatccagaat tttaaggcct ctgaaaaata atgaaataat aaaaatagtg 240
gttttgagat ctaaatttat taatatTTtg gattcctttt ctcagccaaa agctactatc 300
tgaattaagc ttttcagttt aaaagcctgg aagaccatcc ttagaagaca ttaaaaaatt 360
acttctgata cacacactcc taataattta gatagatatg aaaacaatct caaatnaaga 420
tcaaaaaata aagtccttgt aaaaataacc tttggttgct cccaccaca ccgtcatatg 480
gatgatttaa actgcaatca tgaaatttgg aaaaaatngn ncgatcttat ctnttaaaac 540
ccttccntcc aaacttgaac ctaaaanggt tcttgn 576

<210> 8936

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8936

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
aaagtaacaa atttgctggt gccaaaattt atttagcctg tttcactggg acgaactcac 120
gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgct 180

tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
 agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
 aagggaaaaa gtcagaaagg aaaactctct gcctataggg atctatagga gttacagata 420
 ttttcaaact gatgatgaaa aatagatcgt gcttctttgg agcaaataat taacccccctt 480
 tatgaataaa ccntaaaatg tcaaacttta ctactgaag tagttggctt ctggggagag 540
 attcaactca aaattcccat tncatatttt gg 572

<210> 8937

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8937

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 atacttaaag aatcagactc ttgcaaacag tgacatcatt aaaaagagct ttttttcatt 120
 aacatgtgat taacaggaag gagatgattg gtgagttttc ttcgtaacca gggtcactgt 180
 ggataggaag ggcctgcctt ccttcccacc atggagatcc taaaatcaca agctccagcc 240
 tccatcaatg atgacagggt taccagttac ataagcagat tcatcagaag ccaaatacac 300
 gcagagcatg gctattttct ctgcagttgc gaatcttccg tcttttgtct cttcaggaaa 360
 tcattccgtg cctcttcagg atttctctg gcttgnattc tttctttagt agaatggcgt 420
 atcaactgtt cctgggcaca cacagtttgc acctgatgcc ctgctgggat gaaatctgca 480
 gcencagatt tgtgagggcc aatcacgnt gccttggttg ggctgtcaca cattgggtcca 540
 actcctgagg gtggaggaaa ggtcaccaa 569

<210> 8938

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8938

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aagatgaaac agtgttcaact cacaaatctc ccagttgccg ttgtgttccc caggcttcac   60
agacagcctg gaaaaactcc tctagggtt gcagacttag ctggaaacta atcctgagca  120
ggaagcttgg cttgaaggga taagagggga ccctccaggt tggcaatcac gccgtttatt  180
cgcacttggc agcaagacaa tggatgatgt gggaggtgcc aggcccctgg gttggcacta  240
atttggagta tggttgagac agggctggag agaggcatct tagaggtggc ccccaaactcc  300
gcaatcgga gaaaaaggca agaatcgact agagattgtc aggataaagg gaggcactgc  360
caccctgtct atgtctgtct gccccacag gggcttcttt aatacctggg gttccctggg  420
tgatgaatgg tcctcctacc cttggcaagg ggcctaccct gtcgccngg ccccataggc  480
aaccctgat gaaagagtnt catttccaag ggggcttttg gttctggggn ggnccacact  540
tgtcnggggt aaatggcnct gaaatgctta ctgagccn                               578

```

<210> 8939

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8939

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gtgtcatatc catagtntat tttaaaaaac tggntaaaaa ctaaccatac nggtttatta   60
atatacttaa aaagtntgtn ccctatgntg aagtaaaata cattagcaac atcttncgga  120
caccatcttt ataaaagtaa aacttctaga tcctgaaatg tactacagta gagtctatag  180
ttnacacttt taatcacaga ttggaattca ttctccttac tcccctactt cccacatgtg  240
gcagttatta cttcaaaatt aatgacattc actcatgtta tactaccaca gatccttaaa  300
tagagtacat actgcataat nactaacaga gccagtcttc tntatttggg gtcacatatt  360
ncatataagc atttgactta aagnacaaat agaaatacta catcccacaa ttgtaaacat  420
tcaccaggag cttccatagt acagtaagtn acagaggngg cccaagagtc agtcaagngg  480
tcttcactcc tggaaactgg tgaaatttgg aaaaccngtt tgnagggaaa tnttcnaag  539

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<210> 8940

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8940

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ggaggtatgt cctgaacttc catactatta actagacaca gaactgcaca gcaggatgcc 60
tgctgtgtgc attccagata tagtacatag ctcagctctc aaatcagcaa caaagaagat 120
aagcacacca ggtccacata gcagagaact tcacattatc aagtttctat ccaaagcttc 180
aaagaagcaa ataatatattt gaaagactat gtgataaaaag gatcaatttt tagaaagttt 240
catgatctgt catggatcaa tagtttataa aggacactga aacttggatg ttgaggcaat 300
gtcaaattgc cccaagtttc taaatgctta ctcttcattt ctgtacttaa tgtggacttg 360
gatcaaatag ggcatgaacc cacattggtc cntggactgg atttgacta gtattgggtt 420
aaagaagttg tcgttactcc tcgaggtagt ctcagatcta atttctcttg gattaattga 480
cactaatact tgaagcnctt tacttactac tngagaatct atctactggg tatgctttac 540
gncttagctt tatcaaattt taagntttgn taaaaccnc 579

```

<210> 8941

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8941

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gcttcatgtg aaattttattc ctcaaaaaaa aatcattttt tctaaacgta actcaacatt 60
atagtaatta tgcaagattt tatgcagctt caagagttag ccaagagaaa agttgactct 120
tgcaagaaga tattttcaat gtctatgcag atcaggtagg taagagttaa gtgcggggga 180
gttggcatca tctaaaagac tgtagaaatt ggaccaaaaa tgtggagttc taaagcagta 240
tctccttatg gcatgccatt atttggagca acaaggttac ctactcgaat cactggatcc 300
tgagttgaca caaacgcat ctgttgactc agggtttgta taaccacgtg cagtatttac 360

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taggctatcc aattctgggt ccgtacaact tctggggcct gcaaattatt ggagagtgag 420
 tgaagggcaa ccgaaaagat agcataaaag gccccgtntc gaaaggnaac tggcaacatg 480
 cactccacgt ttttagaacc gattcaatng gccccggtgg aagccttaat ggaccattca 540
 gaaantnacc ctttggacna ttggaaatnc ctttgcnnaa a 581

<210> 8942

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8942

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 gtgcagtggc atgatcttga ctactgcaa cctccacttc ccaggttcaa ggaattctcc 120
 tgcctcagcc tccccaatag gtgggattac aggctcccgc caccacacct agctaatttt 180
 tttgaatttt cagtggagac agggtttcac catgtttggc atcctgggtct cgaactcctg 240
 accccaagtg attcaccac cttggcctcc caaatgctg ggattacagg ctttgagcca 300
 ttgtgcccaa ccacaagcac gtaagattct gaaggaggat ccaacattta catgaatttt 360
 taagccagaa ttgggcttca agagattttg nccttcctga ggcttggcct ggctacttcc 420
 ccagntacaa anaagtgggtg tgtgcctntg cctncacat taggagcagg gtttggaac 480
 ncccatggtg ncaagaa 497

<210> 8943

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8943

gaaaattcac agcattttat tcaagttaat caatttcatt caataatctg ccatattgtt 60
 cccagcacca ctattactgn gtattatttc tctttgagga agaccaggta ttaagaaac 120

tggtttgaat ttccatgatg cctaacteta tggttaaaaa tccttttctt taccaaaaag 180
 gaactttctta atcaccagag aaacagaggg aagactgaga tatgtttgca gaaatttatc 240
 tctactagag acaattcata gttcataatc tttcagggtt gtgctttact tgggggctcc 300
 gttttcggga gcggttgggt tcccataaat gtttgcttaa tacaataat ttgccccact 360
 gtaccacaga aggggaaatg agggctagtg tccccagaaa gcaagcaggc agtcctncag 420
 ggaagaagcc ctaatggctc ctaatgggtga cagagtcatt ctggctnccc agcctgtgag 480
 ccaatattaa agtttaccta agtggacccg gagangnaat actagccnga taaccangg 540
 cttanaactt taacngaaat gcctgggggt tgaataatcn a 581

<210> 8944

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8944

aaagaaggaa ggggtttatt aggccggagg catcagcaag actcctgtct caagagccga 60
 gccccgccc cgagtgagca attcctgtcc cttttaagga ctgcaagtc taaggggggtg 120
 tgcgtgagag ggtcgtgatc gattgagcaa gcaggaggta cgtgggtacg tgactggggg 180
 ctgcacgcac cagtaattag attggaacaa aacaggaatg agattttcac aatgcttttc 240
 tataaatgt ctgtaatcta tagataacat aaccgattag gtccgggatt gattttcaac 300
 taccagtccc aggggtgtggc gcccgggctg tctgcttgtg gatttcattt ctgcctttta 360
 agtttttact ttttctttct ttggaggcag aaattggcat aagacaatat gaaggggttg 420
 tctcctcctt ttattcccc actttgagac tctnactcaa tancnnggag tngttcaagg 480
 ttactacca tgttttcttt gctagacaga tcaatagnga ttatatagna cccttgggct 540
 gatgccattt gggcactaag ganccatnaa cttttatctt tgaanaa 587

<210> 8945

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8945

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aaaataaatt cttttattga gatgagagac ggacacacac tgggagggtt ttgntttttg   60
ttgttgattt ttttgtgact gagtcccagt actcaggag gctcagactg gaggcggcgg   120
agcaggcagg cggcggcaag gctggcccc tggcgctggg gccgcgcata cttgaggaag   180
actgcggcgc gacccggcgc gggacctcg agcgcagcgc gggccatgca cggntcgagg   240
gtgcccagtt cctcggggct gcagnaggga natggnnaaa ctgatgcang nc           292

```

<210> 8946

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8946

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cattaaaagt aaatttattg tttgtttaa aaaaacaaca actgtgcaat atgtgctgnt   60
caagacatgt tttgaatcgc tttgttggtc atctcttctc gggcttcagt ttggcaaggc   120
tgaacatgtc tccaagccc ttcagcattc cttcttggc tticatttta tccttctcct   180
tatctctatc tttcttcttt tcttttccag ttttctcct ttttctatca gtcttatac   240
ctttctcttg gtttccattc attngnctct ccagagagtg ggaaggctga tcaactggctg   300
tgatacaga ctctctccct gatcttgaac tttcttctgn gtcttcttcc aaggtctcca   360
tgccttcac atcatcatct accgcgggtt tatcataaga tttgtcgatg gcagctctga   420
agctctcatt gcatccctg cctctgatta tccgcggccg tggaccatgg aaanggaata   480
tnccattca aagncctcg gnaactgggg gctggagact tttcaaaggg ctngcttttt   540
anaccnngg agggcccat tttt                                           564

```

<210> 8947

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8947

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gcaagtgggt tctttagctc tacaaatfff taatatatat tataatacag ttaattgaca 60
attacagagc tgcatttctt ggctgggatt taacaagttt aaacaaggta atgaaatgaa 120
gaaaaaaaaa gtctaaatca acttactcta tatgcaatag ctcttcccaa gtattacgaa 180
actagaaagc atcattcatt cccaatccat tgcactaatc catcaatttc tcaatcatca 240
ctcattctta acactcacia tctttctctt cctgntagtc attcattaat ttaataaata 300
tftaatgagt cctcacaatg tgcagggcac aagtagaata tggaaaacac cgtactgcca 360
aaatagggtca ctaaagtcac taaggnacac taaaggcggg gcgaaangtg gtgttggaga 420
cagttccaga gcttaatgct ttttgcttgn caagagtatt cttaatccnc agtaggatga 480
cccactggtc tttccagtga aaggftaatg gaaaatgngg caataagncc tnttttcctt 540
ttaacaatta gaatgttntt gaaaaaatan gngagactaa aggcccc 587

```

<210> 8948

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8948

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gagatggagt cttgctctgt tgcccaggct atagtgcagt ggcatgatct cggctcactg 60
caatctccgc ctcccagggt catgcaattc tctgcccga gcctcccaag tagctgggat 120
tataggcagg cgccactaca ccagataatt ttigtatfff tagtagagat ggggtttcac 180
catgttggcc aggctagtct cgaactcctg acctccagt atctgcccc cttggcctcc 240
caaagtgctg ggattataga tgtgagccac cgtgccaga catcgacat atatcttaat 300
gaagcaaaaa actcaggggc aagaatagca agcatgatac cacagtaaga aagtaggtcg 360
tgtgtatagt cagatttgta caattactcc tcaaatggaa taggaaaatg aatggaaagg 420
aattgtatta aaatgatctg atcccaaagc tcttgctfff ctgggattaa ggtaatgggt 480
tacaccaaaa cgtctgggtct ctgcactatt ggatctttcc ccattggntt ctaaataatt 540

```

gttgcncgg gactaaatct ctttcaatta atttaatcca aaggaattag gaaaacccaa 600
t 601

<210> 8949

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8949

gaggcagagt cttgctctgt tgccccggct ggagtgcagt gacacgatct tggctcactg 60
caacctccac ctcccgggtt caagcaattc tctgactca gcaccaagc agctaggatt 120
acaggcatgc accagcacgc ccgactaatt tttgtathtt tagtagagac ggagttttgc 180
catgttgggc aggctgggtt ctaactcccg acatctggtg atctgtctgc ctgggcctcc 240
caaagtgtg ggattacagg cgtgagccac cttgcccggc aagcagcctc tgatttcaac 300
tcaagagaca gaagaggatc ccaaattcca agcaactccc aagatgcaaa tcaaaatatg 360
gaaatgttaa acaaattgaa ggatttccca atagttacct gcaacaccta aaggcactgg 420
tttccaaatg ggcaagaact ntgcaaacaa tatgttgggt gctggtnaaa tcaaggccng 480
gaccttttta ccggtttaac attttggntt ggnccitttg aatttggggg aaactttana 540
ccccctgttt aacttangga ggcctnaaan t 571

<210> 8950

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8950

gagatggagt ctttctctgt cgggaagaaa gaaagaaaaa gaaaagaaaa gaaaaaagaa 60
aagaaagaga agggagggag ggaattagt accaaaaaga aaatgacatg atcagtgttc 120
ttttaatcac tcacacctga gaatcaaatt cattaacagt caacttgcgc agaccgtagc 180

aggtttcacc ccagccttag ggagtttatt tttaaagtca cggccttggtg catagttttt 240
 cctcgaatat gtatttcaca agtccttccc acaccttccc tggtagagaga aagcaattaa 300
 gactacacaa tggcatgact tacagaaagc aatttatgaa aggtagcctc actaatgttt 360
 tgcttccagg cttttcgata ggggtgttctt cttgcctgga atgcttggtc ctccctncaca 420
 ttcacttccc ttgcctaac taattgctct tctaagtggc tcatcgcatg gatctcatac 480
 gtcttaaaaa ccttcattag ttcctaacac tggatcgga cctttcatgc ttcccaaagc 540
 atcctgcttt accctacacc agccccc 567

<210> 8951

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8951

gggagtataa aaataggact tttttcctta tcacatcaat tatcaaagaa acagtacgta 60
 acaaaaatac aaagctctgg tggatttttt tgtcttttgt cccccccacc accacttcta 120
 cccaacagcc ccttgccagg gagcccttgg ctgaagcctg gacgctgtcc ctgagggtgac 180
 cccagggctc aggagaaacg gtggtccagg tctctctggg ggctagcaga gtatgagtag 240
 gccttgccca ataccaagcg gtcccggagc agcttgaaga aggcatagta gttgctgaag 300
 aggatgaggg ccagcgagat ggtctggtgc cacttttcag aggacattag ggagtacagc 360
 tgatagacaa tgacagcgcc ctccagcagc aggaggatgt tgaggatccg cangggtttg 420
 ctgaaaaaga aatggaaacc ggaagtggga aacctcagaa gggatagccc cgttgtaatg 480
 gnctacngct ttgtagaccg tcttgctggg cttanacaa acnccctggg gcacatgcat 540
 tnttaancca cgggtgctgg aa 562

<210> 8952

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8952

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gctgtcacat catgtatgta ttttaatttat acaaataac accaaggag gaaaggtaga 60
tgggggagcg gggaagatac attatgattt gaatagtgtg ggtgattctg tccacgctct 120
acatttaatc gacatgatcc agtgtgagca gagatgggag aggtgaatcc actgtttctt 180
cgggcctgtc cacaatgtga gtatctctgt cctgaatgtg gtcctaatat ttcataaagt 240
gtatattcca aattaacata aacctgaaca gaagccaact acttcatctg gtgcttaacc 300
aaagaaactg ctacacaatg tttcaaacac aggagaaaac ctggttggtta catatgctgt 360
acagtatacc atacttaatt ataatttaac agcaaagtan aattttgacc acacaggact 420
tttgctttta gatagacttt agaatctaac ttttccccct tttaaagctg gactttactg 480
nntatcctct tncacaaacc tttccaaan ggatcnttnt tttccacttn agggc 535

```

<210> 8953

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8953

```

gagacagagt ttcactcttg ttgcctagc tggagtgcaa tggcatgac tcagctcact 60
gcaacctctg cctcccgggt tcaagtgatt ctctgcctc agcctcctta gtagctggga 120
ttacaggcag gcgccaccac gcccggttaa ttttgcgttt ttagtagaga tggggtttct 180
ccatgttggt cagtctggtc tcaaactcct gacctcaggn gatccgcca tcttggcctc 240
ccaaagtgtt gagattacag gcgtgagcca ccgtgcccgg cctagatttt tttttgctta 300
aagacagggt cttgctctgt tgccaaggct ggagtataag tggccaatc atagctacag 360
tagccttgac tatctgggct caagcaatcc tcctgcctta cctcccaggt agctgggact 420
ataggcatgc accaccaggc ccagctaant tttttttttt ttngggcgga atttnactnt 480
gnncccaggc tggaatgcan tggcccagct tag 513

```

<210> 8954

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8954

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gagtttttaa atagtcaagc tctcactttt caaatgttgg caaatatttt taaaaattta   60
aatgtgcagg ccaaacaaga ggcacaggga aacaggcagg ccacggcctc tgcagccctg   120
ggaaacgctc tgagtgatgg tgtacaggct atgcagtggg gaaggaagaa ctcagcacag   180
cctccaagga caacttggca gtatctatgg aaattttaca ttcaatagcc ttcgacccag   240
caattccatg tctaggagtt gattcttttg aataatcact tgtgaacaaa acacaggtn   300
aagaatgttc cctgcagtca agtttcagct gggcncantg gtnnacacct gtaatcccag   360
cactttggga ggccaaggca ggggcgatca cctgagggtca ggaattcaag accagcctgg   420
gcaacatggc anaactccgc ttactaaaa atccaaaaat taccttggnc ttggtggcnt   480
gncttгнаат cccgggttagc cggaaggtnn aaccccanaa ttg                               523

```

<210> 8955

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8955

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cctgtaactg tgtttaaatt ccttatagat gctagatatt agccccttgt cagatgcata   60
gtttgcaaaa attttctgtc atttggtaga ttgtctgcc tgttgtttat tttgctatga   120
aaaagctctt aaatccaatt tgtccatttt tgcttttgtt acaattgctt ttggtgtctt   180
catcatgaaa tctttgccag ttcctatgtc cagaatggta ttgcctaagt tatcttcagg   240
atttttataa ttttgggttt taactcttta aaccatctta attttgtnc atagtaaaag   300
gggtccagtt acgatcttct gcatatggcc aaccagttat cccagcacca tttattgaat   360
aggagacct ttccccattg cttggttttn gcaactttgt tgaanacaaa tggctggang   420
gtttngngnc taatttttgg gctctctatt ctggcccact gncctgggg gncc           474

```

<210> 8956

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8956

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gctttaaaaa attttgctat tgntataatt ttgatgcaat ggatcaaaat caagatacca   60
aaagaatatg ctcagcaagt ttcagaggtc aatatttcca tttaaaatta tattgaaaat  120
taaactagtt gaatcataat tattttatth agcaataaaa tagctacttc ttgaaaaat  180
tacttaaacc tataaacctc ttttaaaaat tgataaatgt tttatgatct tactttactt  240
ttttttcctt aagattctga gtcttgaaag tttatttcaa agaaaagaca atgcctgtgc  300
cacatatttg acttgggtga gtgactagaa actccaagag cgggataaac caaatttggc  360
tagctgaact gtataattht aaaatatttc cttttatctc ttattctggc tttacctgac  420
atgatggcag catgtgagca aggacaatth caacatggcc ctgaaaaagt cagtaagacc  480
aaccagttag ctthngnccc cagcttttcc tcatctggaa ccccatcttg gccaataaaa  540
cctggacctt gatgggattt gaaaagccat n                                     571

```

<210> 8957

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8957

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atcaagatag ggthtcactg cattgcccac actgggtctca aactcctagc ctcaagcagt   60
cttcccacct tggcctccca agtgctagga ttgagtgtga gccactgcac ctgacctata  120
attctggtht tagcaataga cttacgtaag ttggttataa ataccatgag taatttaagt  180
gatagtaaga gaagtaggat agagactata tcaaggthtg agatccttht gtcatttgta  240
agtgatgatga ctgggcattc acacgtgtga gatgtgcctc cctcaaacct tgthtatgacg  300

```

tcggcacttt acccatgaaa aaggggttga actgcagact ggaagaaata ggaagccaat 360
 taaatagatc attgagaaga tcagtagttt gtgcctcttg taaccattta gcttgcttgg 420
 aaattctttc tngcaagtc tntactttac ccgangngtc natgtaagt caacaggcct 480
 gtgagctctg gcaaacttct tgnccan 507

<210> 8958

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8958

agtagagacg gggtttcacc cgtgttagcc aggatggtgt cgatctcctg gcctcgtgat 60
 ccgcctgtct cggcctccca aagtgcctggg attacaggcg tgagccaccg tgcctggcct 120
 gtggtgttta tttttctatg ccaggcttat ttcacctaag ataatgccct ccagttgcat 180
 tcatgttgcc acaaatagaca ggattttgtt ctttattata acttaatagt attccattat 240
 atatgtatgt cacattttct ttatccattc atctgttgat ggacacttat gttgattcca 300
 tatcttggtt attgtgaata gtgctgtaat aaacatgggg gtgcaggtaa ggctttgata 360
 tattgatttt ctttcctttg gacatatatt gaaaaccata tgattaaaat caataaacac 420
 aatgaaagca tttggcaaaa ttaaactgtc ttacatgaca aaagcctnta aaccaattta 480
 agtngggaaa acatatgcct taaccacaaa angggcgtaa agacaaccct tcagcttaan 540
 atcatnctgg acctggnaaa ngggaaaaat ggtnccttga aaat 584

<210> 8959

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8959

cagttgtatg ccaagtgttt aagctttact taaagtaaaa ttagagtatg aaacctattt 60

gacaatatat gaatacaaat ccataaacc tgaacaaaag catatataaa tgctcttacc 120
aatgcaaaaa cttccatctg ttagatacat aaagagcact tccttaaaag cgacatgtat 180
tttatactga ccgctgtagt caattttaat caaaaactac acaaataattt tatttgtatt 240
ttagagacgg ggttttgctc tgttgctcag gctggattcc aactcctgng ctttaagcgat 300
cctcctgcct cagcctccca agtagctggg actacagatg cacaccactg tgcccagcta 360
aatattttaa tgngattggg ttcaacagtt tatacccaca gttttgatgt gaaactggca 420
aacctatggg ctgacagcca cagcccatgt agagggatga ctntaagcnc acttaatttt 480
gnttaaaaaa aaaaaatctn gaccctgnta aaggncaaa ctgaatggaa aatgggggga 540
tttaatcntc catgggggac 560

<210> 8960

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8960

agagggtaaa acactccaat gccaatattt tttcaaaaag ggctctgtgt tatectatag 60
tttgcctttt tttttttttt gtataattgt acaacctttg aaagttacat aagttgtgat 120
gatctaatac tattaatagc cattcagaaa acactttccc tccctcccaa caaccatcca 180
gggggaaata aaagtcctga aaagaggcca gttcaacatg gcctctaccc tggtagaaac 240
aaaaagtga aagagaagaa aacagaaatc aactaagagg tgttgccagt gtctctcagg 300
agtggggccc tggtgtttgc ctgggggtcat gaaaggcaga gcctgcagca tgcagtatgg 360
cagccgggag accttgcagc cacatcttcc taccocggca catncacatt ccaacttagg 420
ngtcatggga atctttcanc anggtcttc ttcgntgntt ccgctttatg catctgggtc 480
ttcaagtccc cnttggcata ct 502

<210> 8961

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8961

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gtatttttag tagagacggg gtttcaccat gttggccagg atggcttcaa tctcctgacc 60
ttgtgatcca cccaactcag cctcccaaag tgctgggtatt acaggtgtga gccaccgtgc 120
ctggccagtc tctgtctgct ttgttaacta ctgaaggctt taaaacttaa aggagaatgt 180
aaactacaaa tgaccaata cttaaagctag ttaacggaag tactgatact ttttattctt 240
ttcagggacc gtttatctaa aaaatgttaa ggcttatgct ttcagatctc agtccaattt 300
ctagaaatta acaatgagtc cttttatagc acttaccttt ctcttcctgc cttccccacc 360
tncaccccaa acttgctttg ggtgttcttt aatctttcaa gggagtgata aatgtcacia 420
actcttaaat aaanggtga aatggcaacc gtatgactgg ttgactggc tttnaagtag 480
tattagnctt ctanaatcta atctaaatct tagaaccgga aacccgangg aactcaatng 540
tccaaaggga agttnataat aattggattc ttcneg 576
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<210> 8962

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8962

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aaagnhtagc aaccctttta tggaatgttca atacaatacc cgtcatatc acttatacaa 60
actttctcag tacaattttg ttcacgatca tgataatgct gaatgacaga gtgaggaagt 120
gggattaaca aaaaagtaaa agcttcaga ccagccagag cttaaagtcaa attaaggctc 180
tgctcttgcc agccactcca accttaaaga agttatgtta ttatcatgga taaattttta 240
cacaagattg taaaaattaa acgttaagga taaaagccca caacacgtga ctgatattcc 300
tcaaataatta atttcactat ttgtgacccc taaataaatg catcttcag gtgttctgaa 360
cacctagggt atagctgctc agcatgtaag cccctatgat aacttgagcc ctttccccctt 420
tccttcccca gtggtgaang gagaatgaca ttccttntcc tggccactgg ctcaaagggtg 480
gcttatnggc tatgcacagn tcccccaata nttcctgggt ggagctcnn tttcaagggc 540
```

naggccaa

548

<210> 8963

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8963

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gatttaattc ttcagctaaa acagcggaag aggngattta ttatatgggt ggtacacttc   60
gggccc aaat aaacnccaga aatagtcenn gaatgtcaca aggtccaggg cagaggactg  120
aaatttgtgg cgagctgcat ggaaccgttg gttgatccct acttggtacg atgactggta  180
gccagggtcg ctagctgatg accccaataa acgcitagtg agtaccggcg aagagcaagg  240
agaggatggt agagaggagg aggcagtgtc gctgggagac agtgagctcc cactggaaga  300
gaggggactg ggcatgtgga ctggagtctc aatccccaca ggacaccac cattctccac  360
tggtttctct tgggccaatg ccacagattt ttcccggtga ggcaattggn tttctacatt  420
ggtgcctgca ntcaacttcc tgggagtttg gatctctngg tcacaatggc ccttgggttt  480
tgcattttan tnaaccngaa ttgcagg                                     507
    
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<210> 8964

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8964

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cctgagcagt cggncccaac agtgggctta aaatactcag tccactatga tgtaancaga   60
catgctgnca tccaggcttt gttgntccat ttataangcn caggcagagt agattcacca  120
aattctaagg gtcctaggat tatcagaatg ataaangagc actagcttcc acttaaaagt  180
gaccagctgc attatccact aatgagagtt agcntgtcct ttcaaagcag atgttgncn  240
ctntctagtt atgaaagncc tanacggcac cttcttncaa tggaaggctg aa          292
    
```

<210> 8965

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8965

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aagtgttaca aattttatta aaaattaaca tttcaagagg tcatacgtat acaaatacaa 60
ctgcaaaaaa ttccaggcat aaaaactatt atctgggtta gtgtgccatc tttcttctcc 120
aaatgtcaaa atgtccacaa aaaaagtctt tagaaagtca aatccactgt ccatttgtgt 180
tgggtaagag acctatgtct tcattcactg catggaatcc atgttaaaag aaccctgtct 240
tggttgtata ttatcacagg actcttgtat taatccattt ttcctcaatt ccccatagta 300
gactgccatc ttgatttctc agtggtaggg tccatttgaa actcttcaag ctgactgggt 360
gtaaagtgtt ccaccaatgt ctacttcatt ggatggggcc tttagaggat tcaagtttga 420
ggttcatatt tttgctatat aaaatactga ctttnccaaa gatttccttt atcctctagg 480
ataaaactnc acggtctcag cttcaaaatg gcataacctca aatnaaagac ccattattgg 540
tcagaaccaa ccgnacccaa tttatttttn 570

```

<210> 8966

<211> 464

<212> DNA

<213> Homo sapiens

<400> 8966

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gagaaccaga atgcttatat tttattagta tccaagactg gggagaggga tggggtggga 60
gagatcaaga attgggggagc agatggggagg cgctacctca ctcaggagac acgagttctt 120
atccaagttc aaggtgaaag aagtgagggc aggaagagaa atctccctgc tagcaacagc 180
gactcaggga gaaactctgg gcccatagct agctggaggc agggtgacat tgctcccacc 240
aatgggcat cttcttagct acacctttgt agctgtggtg ccaggcagaa gaaccacctg 300

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gaaactgagc taaggcaggt tccttcttcc aacagaagac acagctgggc agggactgtg 360
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<210> 8967

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8967

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gtgaggcant gacttgtggg ggtagatgt gggcctgccc cacgtgggca gggatcagcc 360
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caaagcccca ttgttttaag 440

<210> 8968

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8968

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gtacaggcat ccttaggtgt ccacgtattt gggacatgta agtggagagg catgaacctg 180
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 tnaattccct ttccangact tcgaccantc ccctaaaccc agagcatttt tttccctnat 480
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 cctgancctt taaaggangg gtttt 565

<210> 8969

<211> 357

<212> DNA

<213> Homo sapiens

<400> 8969

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 cggctgagtt tcccaaccac aggtaaaggc cccacccaaa agccaaattc tttcagtcaa 180
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 aaaaacgtaa aatcaaaaga aaggtttgga aatgaaagtt taaatatggn aactgaagtc 300
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<210> 8970

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8970

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 ggtagggat cccaaggggt cgctgccttc ctgggtctct ggccctggccc ttggggcaca 180

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 gactcagcag gcacagtga nctcgccagg ctccactgag agtccacgta ctgnccaatc 420
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<210> 8971

<211> 410

<212> DNA

<213> Homo sapiens

<400> 8971

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<210> 8972

<211> 386

<212> DNA

<213> Homo sapiens

<400> 8972

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 cctgtcacc agactggagt gcaatggcgc gctctcggct cattgcaacc tccgcctcct 120

gggttcaagc aattcctgtg cctcagcctc ccaagtcattg gggatcacag gcatatgcc 180
ccacacctgg ctcatTTTTA tATTTTTAGT agagataagg tttcgctacg ttggccaggc 240
tgctctcaaa ctctgggtt caagtgatcc acccctctca gcctcccaaa gtgctgggat 300
tgcagagcca tcatgcccc cctaaaaaaa ccggtattaa atggaaagnc aagtttaa 360
gttccngncn cnatggctna ngcctg 386

<210> 8973

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8973

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caggcacgca ccaccacgct cggctaattt ttgtatTTTT agtagagaca ggTTTTcacc 180
atgttgGCCA ggctggTTTc aaactcctgg cctcaagtga tccacctgcc tcggcctccc 240
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tatnctgnan gctgcaggnc ttaagnttca ncaactcncg aaccaaAaga cttaaagggg 480
gacttggtta aaataa 496

<210> 8974

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8974

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 tcatacctgg agtcctttat attaaatata ttattttacgc aggcactagg caaaattgaa 180
 gaagttttga gttatctcct ccataacccc caccttccca cattcccaca aaaaaatccc 240
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 tcaatttgaa tcacttttcc ctatttttac atgtctggag atgttggctt ggttatgaat 360
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 cttccaaagt aatttccatg aatgncttta gttttctgtg aacagtggct gnaaccttcc 480
 ttacttttgg cttttatggt acccgcttta taaccggat tatntgccc gcannccgga 540
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<210> 8975

<211> 349

<212> DNA

<213> Homo sapiens

<400> 8975

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 gtgttaacta acatacaata ggactgtacc cttttacagg attgagtgtt ttggatccca 180
 ctcacacact aaaaccctgc cataaagttg tatcaattag ggctgttcaa atgtgaaact 240
 gtattggaaa atgggaaact ttatctcctt atatatgtat attttttgag atggcgtnn 300
 gcnccttngc ccatgctgga ntgaagtggc nctatcctgg gtcactgna 349

<210> 8976

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8976

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 ggatttaaat ttggagtatt atgagttggt tcagaagaat ttaagaaagg cagtctcaca 480
 aaacncacca aattttattg agggaaaaga ctttgcatga aattaatttt gaattttgnc 540
 cngccatttc attccactga ttt 563

<210> 8977

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8977

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 tctttcaatg taaccaaacc aaaaccatgg catacagtaa actaaaagg tagacaggag 180
 agaaagggtg ctgcaattac agaaaattta gaaatcagcc ttaccagtt acatctgaga 240
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 aaaaatacaa aaaattagct gggcgcgga ntgtgtgcct gtagttncag ctactcgga 480
 agctnangca ggaaaattgc ttggancccg gaaggcaaag gttcaatgag cccaaatcgn 540
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<210> 8978

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8978

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gcttaagtaa tgggtgcaga agtccataag caccctcgct cctggaacat taaccactct  180
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tctgctgtcc tattttatat attgnatata atgcattatg ttgctctagt aatttttttg  360
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aaggaaggcc tgctggcaga atccttattt aatttgcaca gtagaaagtt gncttatgng  480
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<210> 8979

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8979

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gattacaggc acatgcacca accctggcta atttttctgt attttttagta gagacagggt  180
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cctcccaaag tgctgggatt acaggtgtga gccactgcac tggcctaaga ttttcatttt  300
aacagggaac tgttagaaca gaaaagaagc ttcccaagag gcactcattt taaaaataaa  360
ttatagctta aattattact atgtggatta tatcagcaaa ggcagaaaga attaatgttt  420
tcttcctttc atgaaccttg taaggctagt gttgagtggc ttacaaatgt catataatgg  480

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actgtaaadc atctgccata ttgatcaatc atgttaattt aaggttttct taacattaga 540
gatttttaac ggggaginta aaat 564

<210> 8980

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8980

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caggtgcccc ccaccacgcc cagctaattg ttgtatTTTT agtagagacg gggtttcacc 180
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<210> 8981

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8981

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ttggccaggc tgggtctcaaa ctccctgacct tangtgatct ggccacctta nccttccaaa 480
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<210> 8982

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8982

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aatttncnca aaatt 555

<210> 8983

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8983

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<210> 8984

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8984

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<210> 8985

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8985

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<210> 8986

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8986

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caccgtccag tccacaggca gtgttgatca tatcgagccc acagcagttg catacatggc 480

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aaacccng 548

<210> 8987

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8987

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<210> 8988

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8988

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<210> 8989

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8989

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 gcataatg 548

<210> 8990

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8990

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<210> 8991

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8991

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 ttcaggaaat aaatgacca caattacca gtgaattcca tgtagtgtta agaataattg 180
 caggtaactt cttcatgtaa ttaccatgaa attgagtata atttagagaa taaaatcagg 240
 aacatactcc taattgcttt ttgatccat taagcatcat tctcaatctc tcactaaatg 300
 cttgggtgcc tcaaactagt ttttgnttat aggctagatt ttaaaacact gntttattat 360
 aactctgtta atgtatctct acatagcact tttaaggcag atgtgaagag atcaactgga 420
 ataagctgcc aaccatttat atacnatata aatattttgg ccaagaatgc agntttacca 480
 gcttaagcct gggctntaaa cccatcaacn tttctatgat aanccaggga cttttaaggg 540
 gttctaataca ggtttaccta tn 562

<210> 8992

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8992

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ctgtaccact tttagcagca gatgaaagag tttcttttcc tgcaattgag acagcactgg 60
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ctcgagggct tggttggcct ttacttgaga ctgatttttt cactgaggcc acatgatctt 180
cagagattgc aagacgcctc aaaacatcag ccaaagccgc ctttagcaca gtgatttcat 240
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ttgcagcaga aatactatca tcgagactgc cggcgaaacc gtcgagttgc acacaagaaa 360
ttaagggact gttcctcatt atgacttaga aaaggcagca cctctctagt agactaagag 420
catgtctgga catccactgg tagtggttaag aaaacnggan tttttaaaga agcacaccat 480
tggaacttggc aaactgaagt tttcttaatt aaaaattttc attnccattt ggggtgaaang 540
gtttttaata gagtcnnttt ttttg 565

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<210> 8993

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8993

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gatttttctg tcctatcaat ttgtctgcct gatctgttag tccctgaatt tcaactgaagg 180
ctcgagtaag aatgagactt ttggaaacct tggaagaatg aagtaatccc aatgtgatct 240
ttaatttctc aaagagatcc ctcatctcac cagccgccc cgcctcattg gcagtgtgtg 300
tccggcgata ataagcaaac gcttctgctt ctttctgtag tttgtcactc cagtaatcag 360
gcttcagttt tagaggaatt ggtggagcct ttcgactcct ttcagctgct ttttcatctg 420

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cagagatgtg agtacaggac ggctggttga atgactgtgt gtgggccgc tgtggncctc 480
 angtaagta ccattaattt cctctggaga gctcttntac aggcttaatg nccacgggct 540
 nctcatcacc ctcaaggant ctaccccggt attcttt 577

<210> 8994

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8994

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 ttacaggcgt gcaccaccac gcctggctaa ttttgtattt ttagtagaga caggatttca 180
 ccatattggt caggctggtc tcgaactcct gacctcgat gattcacaca ccttggcctc 240
 ccaaagtgtg gggattatag gcgtaagcca ccacaccag gcagcgcacg tttttttctt 300
 ttttttttg acacggagtc tccctctgtc acccaagctg gagtgcagng gcaccatctc 360
 ggctcactgc aaccgccaca tcctgggttc aagcaattct tctgcctcag cctcccaagt 420
 agctgggact acaggcgca gccacatgc ctggctaaan ttggatttt tgggagaaac 480
 angngnnan cctattggcc 500

<210> 8995

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8995

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 gctctaggat aaatatggcc aactgaccac caatccattc caatctttaa ataccctgag 180

aattgattat ataatcttcc ctccaaatct gctcttcctc tatttaccta tcttggttgt 240
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 tggccctcca tcaaatttat tgtgaagtc ttagaaattc tgtttcttcc ttcaattcca 360
 tccccactgc ctgtttgttc ctcatcatgg tgcatgaact cctgtcagaa ccttgtaact 420
 gacttccta catcctttaa acatgnggat atcttcctaa agttcaacta ctaatcttcc 480
 tttcaangna ccaacactgg ctttatggat agnatctaaa ctncntggna agggaatcaa 540
 agc 543

<210> 8996

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8996

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 tttaggaata aataaaaaga ggccggggcac ggtggctcac acctgtaate ccagcacttt 180
 gggaggccga ggtggggcgga tcacgaggtc aggagttcgt gactagcctg gccaacatag 240
 tgaatcaccg tctctacca caatacaaaa aaattacctg ggcgtgatgg cgggcgcctg 300
 taatcccagc tactcgggag gctgaggcag gagaatcgct tgaaccagg aggcagaggt 360
 tgcagtgaac ccgagatcgt gtcattgcac tccagcctgg gcaacaagag caaaactctg 420
 tgtcaaaaaa aaaagaaaga aagaaagaaa gaggattaaa atnccctta ngnctggacc 480
 ctttgatcaa gcccgatgct taacgggtgg tggtagctga cagggggtn aangggcccg 540
 ctttgccgga ggngancctt ca 562

<210> 8997

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8997

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gaggctaaaa tcatttaatt atacacaggc cacaattgca ggatggaaag gcagtgggca 60
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tggggcatgt gatggtaggc cagacccttt ccaagggaat actactacac taagcctaca 180
ctgtactgtg agagtcattg tggaacaagg ccacaggcag tgggaggaaa tgtgatgact 240
cactngtca gaattctaag gcccagcatg atcaggatgt aaggctccat aattttctaa 300
accagaaatt atgagaagaa caaaattctg caatcactta tgnnttttct ttcttttttt 360
ttttgagac agagtttcac ccttggtgcc caggctggan tgcaatggcc aatcttcggt 420
tactggaacc ttcggcttct ggggtcaacc aattttctgn ccaanctcct gagtaactgg 480
gaatacaggc atgtgcccc acgcccagtt aatttggat ttaggaaaa aaggggggtc 540
tccaggttg caggcg 556
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<210> 8998

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8998

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gaagacaaaa caaggattta ttgcctctg cgggccttga tttcctaag atagaactcc 60
aactctttgc cctctagcac atagccatct gctcgccac actgtcccgg ccttgaagcg 120
atgcacgcaa gaagcttgcc ctgctggaac tgctcctcca ggagactgct gattttggca 180
ttctttttcc ttctatcgta ttcttctga attttttag atcgtttttt gtttaaaatc 240
tcttcttctt caggagtcag cttggctccc ttcttgcggc ccaggggcag cgcatagtgg 300
gactcgtacc actgtcggta cgggtgtgct ncgatgagca cgatgcaatt cttcaccagg 360
gtcttggtac gaaccagctc gttattagat gcattgnaga caacatcgat gatccttggt 420
ttacgagtcc acacttttga gccccaggag aaatttccca cgtccaacct canggcacng 480
gatttcttgg taccctnccc ggacacggct ggggtggatcc cgccgggggc caacttgggg 540
gtngcaactt gggcgcccc aacttaaa 568
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<210> 8999

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8999

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gatcgtaaac tttattactt ttctatttgt tgtcctaate atgtaatgca ggggttgaga   60
gttcctttac tgttttgcaa cttccttttt tttttttttt tttgaggcag agtctcactc  120
tgtcaccag gctggagcgt agtggctcga tctcggtcga ctgcaacctc cgcctcttgg  180
attcaagcag ttctcatacc tcagcttccc aagtagctgg gattacaggc atgtaccagt  240
atgcctggct aatttttttt tgtattttta gtagacacag gatctcacca tgtttgccaa  300
gctggttttg aactcctgac ctcaagttat ccacctgcct tggcctccca aagtgtctggg  360
attacaggca tgagccacta cacttggcct ttgaaactta cttttacaaa agatagggtca  420
tttctctnct gggaagacca gcgaacatnc cctgggttgg anggcctnca gctntttcaa  480
aattttgagc ccanggaaaa ctggctaaag aaatggaagn ctggtggggc ccnaagg   538

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<210> 9000

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9000

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aaacaaacaa aaaagaagtt tactaaattt aaacactgac atcctgtgaa gatgccagtc   60
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aatgaatac aagtgaata tataaattac aatgaaatag aggaagattg tggctctgtc  180
ctgggttggg tcttttagca gtcatttgc tgtagagaaa ataaaatacc attaggctat  240
aatcaggata aataacgatg acattttagt cttttaagtt cctattttta gcaaacataa  300
acagactgat cttagcttca gcaaagctta ggccaacat acttagggct tggacaatgc  360

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tcacaaaatg tttcctaaac aaaccagat cccttgtctt ccatgagtaa aggctgcaga 420
aagggcccat agaaactgca ggatctgatg gtggggttgc tttgagtga tttgtgtggg 480
ggtttaatct tagggattaa aagatatggc ntggaagntt cacactggta tgaactcaag 540
gngggnaacc ttcaaatnaa 560

<210> 9001

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9001

attgcagtta aagggccatt gccagtcagc tgaagaagga aatgtttgct tctcccttta 60
aggtgttaaa gtaatgcaca gaaaataaaa atagcagcca cataaatctg cacggcattg 120
cattcaagca aaggacaata tgagtaactt agagaaatag ccacattcaa tgcacttaat 180
gaaatcctgt tttctttgga gttacatgag gcagcagtag tagctagtgt ctgatattgc 240
acttttatag cataaacaca gctaaacata gtgttaaaca ctgacagcat cagtacctgt 300
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aaggttataa ttatttgaca gttaaggcat tagaggaaaa aggtttaagg ctatcataat 420
atatataagc attcacttct ggtcaagtta gtgtatttgt ttctagaata cactggttca 480
aatggctcac ttctgggata ttaaaaacta tgggaattct cttattaaag tccaaccatc 540
attatgaaaa aagtccattt aaann 565

<210> 9002

<211> 561

<212> DNA

<213> Homo sapiens

<400> 9002

ggcaatcacg ccgtttattc gcacttggca gcaagacaat ggatgatgtg ggaggtgcca 60

ggcccctggg ttggcactaa tttggagtat ggttgagaca gggctggaga gaggcattctt 120
 agaggtggcc cccaaatccg caatcgggag aaaaaggcaa gaatcgacta gagattgtca 180
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 gnaagtcacc agggggctcc ggaaggtcac ccctgacgtg gaaggcctga nactctgagg 480
 cccatttntg tgggggggca ctggtgccct ccttgggccg ggccaatggc taccctgggg 540
 gtaggtggtg gcgtcacaaa a 561

<210> 9003

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9003

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 atgagatacg ggaggctggt gtggagggtc cgggtcactg gtgactcgcc aaaaaaaaaa 180
 tatattgact atgaggcaag ggatacacca agacaacagc ctccatcac tgtttgcaca 240
 gagtctctt cttaacacct ccttgcaaca cttctcaagg tgctctgaat ggaccagct 300
 atcctggcac agctgctgcc ttacgacatg gccaacagtg gcaggagttg tagaggggag 360
 aggctgggac tgagtctccc ttacagccag cccatcaaga gcacctgaa ggagtcagat 420
 ggctatgcat tgcccaactc caccaatctt aggaatctcc atcatcttac catncattac 480
 ccaagggatg ggagctggtt atctccatcc aacttaattt ctgntaataa tctctatttt 540
 cacttccaag naanctgatg ggagg 565

<210> 9004

<211> 538

<212> DNA

<213> Homo sapiens

<400> 9004

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aatgagtcag ggtctccctc tgtcaccac actggagtgc agtgggtgta tcacagttca   60
ctgcagcctg cagcctcgaa ctcttgggct caggcaatac tcccacttca gcctcccaag  120
tagctgggac cacaggcaca cttcaccatg cccagctttt taaaacatat tttttgtgaa  180
gatgcggtct cattatgttg gccaggctgg tctcaaactg ccggactcaa gtgattctcc  240
caccttgttc cccaaagtgc tgggattaca ggtgtgaccc accttgccctg gcccggggtg  300
tctttttttt ctgagatgga gtctcactct atcgcccaag cctggagtgc agtgggtgta  360
tctcagctca ctgcaacctc cacctcctgg gttcaagcga ttctcctgcc tcagcatccc  420
cagtagctgg aattacaggc acacaccacc atgcccggnt attttctgga tttttaagta  480
gaccaagggtt tcaccatggt ggccngctgg nctnaaangg gggctttaac tnncatgg   538

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<210> 9005

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9005

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ggtagagact gggctcttgct atgtttacga agctggtttc gaactggaac tcctagcctc   60
aaataatcct cccacatcac tgtcctagaa tgctgagatt atagacatga gccaccctgc  120
ccagccagct gatccttttt tttaacctat ctatgccttt gcttgcatag ccacttaaca  180
tttctagttg atcatctttg gtgaaaacta caaaaacaaa ggagaaaagg gcagattgaa  240
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accttcaata cctttagttg tctccacac acgcgtgtgt gtgtgaaatc ttctacaata  420
tcttcccttt tttagaccat gttcactgtc aaaaangtgc ttttaagagca gtctttggct  480
gggcacggtg gctcacacct gnaatcccag cctttgggan ggcnaggcag cggatcacga  540

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aggtcaggaa aca

553

<210> 9006

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9006

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ccacctgaat gccccggaag tctgacgggt aacctgtgca ggccctgggtc aggcctgtgg 120
tccccaaagg ctgccggcag caaaggcacc acggaagctg caggggacag gggaggccgc 180
tgcttcttgc atttttgtct gaaagggtccc tgtggagtcg acgagggaat tctcactgaa 240
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cttcttcaaa atatccctga 560

<210> 9007

<211> 554

<212> DNA

<213> Homo sapiens

<400> 9007

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ggtttacacc tgcacatctt actggtgact tacgccttgg agacaaataa ggccaacgtg 180
tttcttttaa attttcttca tctgcttcga tgtctgccaa aatttttct cttttaatag 240

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 tgtgttctga gaggtgtttc tggtatctct caggaagggtc ctcaaatca ggagttgggc 360
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 atccgcaagc tgacctacaa ggcagaggag atgagttctg taaatgctcc tgggctctta 480
 nctgnngcta aggttccata gaagtcttct tctttaactt ggcantggga gttgaacct 540
 aagtagaatc gagg 554

<210> 9008

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9008

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 aacatttcat gtaaggattc aaagcgggtca tattaaaata cagcttcaat ataaagttaa 120
 tcacagtttt acagtattca aaaatgacag acctgcctta aaaaacaaaa caaaaaccaa 180
 aaaaggacta ttacacccaa aacataagaa aacaattaaa taaacaagtt tggcattttc 240
 ataactttat agtataaaac agaattattaa atttattact ggcaaacgga cactgattta 300
 tttcctttga aatgtgtccc atttaaacac actatacaag ttattatac aaaagatgga 360
 tgatcatttt gatgaaagaa gtgcaccctg aaaatttttg ccagtttaga atatttagct 420
 cttaaagggtt aaaaaaaaaag ccttttcctt ttttaactg aaggctgaat tcagaatttt 480
 tttggtggct catctgncaa gcctttctgg gttnaaaacc atngnggcta ttggccccc 540
 caagggggca nggaagaata ct 562

<210> 9009

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9009

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gcagttattc aaagtgtgta aacaactgcc tgaatcccca tatcccccca cctcggetta 120
aggttgtgaa tgttttaagt ccttcaatca agtttcaact cttccacttg cataaggaat 180
caagagcctt ctctctttta attatgtgtg ttttatcata cagcctacaa tgcagtaaatt 240
cacagtgaag gccctgggga aaacaaaaca acatgatctt tacagcggga ctigaaactt 300
cacaatagta aatgcagttc aagaagcttc ccataataaa agcgcgggtt ttcatttcca 360
gaaatcaagt caattagaaa ccctaggttc tacttaaaaa cccattttga tctaaaagt 420
aaaacagtcc cctatccata ggcattttat aaactctata cagtttact tgcagagatt 480
tttttttttt ncagctngga aacagtnntg gcgaagggtt agcccgggat gccctggaaa 540
nctggtnatg gctcaaggat 560
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<210> 9010

<211> 487

<212> DNA

<213> Homo sapiens

<400> 9010

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aagcaacgca catattattac cttacagtca aggggggtcag atgtctgagg nggggtccca 60
gaactaaaat ccaggtgttg gcagggttg ttcctccttg aactccagg gaaaaatcca 120
tcccttgctt tttctggcct ctggcggcac ttgcactcct tggctcctcg tcccttcttc 180
cgtcttttaa gccagcagcg tccccttggt ctgtctctga ccacggcttg gaaggagtct 240
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tcacacacct acaaagtcct tttggtctgg gaggtaacac tttcccaggc tccagggtat 360
agggtcttga catcttgggg actttattct gccaggaaa ggtggtatca agggagtctg 420
agcatntgaa ccttcccang ggactgaagg aaaggccttn agnggcctct tcctcctcct 480
tannaan 487
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<210> 9011

<211> 541

<212> DNA

<213> Homo sapiens

<400> 9011

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acaataacca aaagatttat thtagacaat ttgtttacac aattatacac attatgatac   60
acgtttgaaa cattaacaca cgtggagact gctaaatcat ttaatatttc ttttgcaaaa  120
agataatttc tttaggctgt gatacctgca ataaccaatc tgttctcatt tggatcagat  180
ctttctccct ctgtcctgga gatctcacag ttcactttgc tgaagcaatc tatccacttc  240
cctatcgacc ttgcttatag cagttcaggt atagactatt tgagccttat atactaaact  300
gttaagccag tgcgtgccct atgccctgct gagaatagat tccttctgta cttgcagccc  360
tcagatgctg aattgatcaa tcaatttttg agacggggtc tcctctggca ccagggctgg  420
aactggtgca ngtcctccag tttgcngcaa aaggttggca gcagaggaga atggatgatn  480
ggcacttngg cttggtggca actgggcaac acgtcctnna tggagncccg gnattcctaa  540
g                                                                           541

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<210> 9012

<211> 537

<212> DNA

<213> Homo sapiens

<400> 9012

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gcttgttaca atctatacat tttatgtttt ttaaccactt caaagtaagt ttcagacacc   60
aacacatttt ttaaattgat cctaccattt tttaaatgat ccctaccaa atggaaggct  120
ggatatccaa ggttttgttc catttctcaa ttctagtctg tgaaattgaa gtctgatgac  180
cactcttaag agggctgttc attaggggtc gggctgggca ttatgagtgt gtttttcatg  240
agtcagtgga aggaggggct tgttgtgagc agtgcattgag aaaaacggct tggctttgct  300
tctttttcca gctctgtggc cttggtcagg ttaccgtctc ttcagtatcg taacttttac  360
gtctcactta cggcattcgg tggcatggat tgtacaggca gctggatttg ctctcttttt  420

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actctactgg tccttctcca ttingctcat gaaaatagnc tntccaagg ttttggcctg 480
ggtttctntt gggccatgga ggatggcttn aggttgggan atcctggaag cggatnt 537

<210> 9013

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9013

caccaagtca tattttaatc aagtactca gaaccaatit aaaaaattat aaaagtaatc 60
agaaataaat atttatgtnc agacgaagaa tgatatgagt gagaacacat ttattgtcag 120
agacaatatg tattcatctg ttctcacact gctatgaaga aatatctgan actgggtaat 180
ttataaagaa aagaggctta attgattcac agttccacat agctgaggag acctcaggaa 240
acttacaatc atggcaaaag gcaaaggaga agcaggcacc tttgtcagat cgggggtct 300
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<210> 9014

<211> 578

<212> DNA

<213> Homo sapiens

<400> 9014

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atctgcagga agcactccaa gtcacactgt tagctttaca gacctgaata tacatattgc 180
attaaacagt ggcacttatg tactcaagtg gtccagtggc tttggaatat atgtctactg 240

ggcatgtgga atagaaataa tgtgttaggt ttaaataaat ggaaagggtg tcaaccatca 300
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 gtgtcagaat actggagaca aagtatgtaa aacaatgcct gttgcagcac cacgtgctca 420
 ctccaactcc cagtggacag tcccccaatg ccttanggtc actcgtgggc aaccaaatac 480
 aatcaagaag ctgatagct tanaataaaa ggctgtaaag ctgatataca gattaaggaa 540
 gcttaacant tcagngcnca tgagttctcc ctanaang 578

<210> 9015

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9015

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 ggtaatggcc agttggggag tgagggtagt gtgcacacac acaaaaccct agggaggtct 180
 ctctgctttt aggcctgcttg tcttgtgcag gttgtcaaag tctgggacag acgtgcatgt 240
 gctatgtgnn ggtacacaat agttcgagtc tgttttcggt tacaatacct catcaaagag 300
 ttcattgagag agggttactt atctctgttt cacagatgag taaaacgagg cttaaaggct 360
 aagtgcattt cctatgtaaa aatgctggat ttcagccact gtgtgcagtc aggtgctggg 420
 cctgggttcc gcaagtggac actggangcc ccttctcatt aatgtagcac agccacattg 480
 agggcggtca ttttggcagg gtaaanatga aaaaagtccn anaagggcaa nggatatacct 540
 ggggggcnta cctttaggcc tttaggngtt ttt 573

<210> 9016

<211> 575

<212> DNA

<213> Homo sapiens

<400> 9016

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 gactggagga ggaacacat tatgcattgt tatcagcgtg gtgtaatttg actgttgaca 180
 aagtatccgt ggcagtgcga atgagcgcag ttagaagtgt ggcggattgt aatcaagaag 240
 atgcttagct gtgcaacact gcatctcgag cagatttgaa tcaacattgc ctttaaggga 300
 cacacacaca taccaaaaga aaaaaaatcc attaat tttt agagggaaaa ttagagtggc 360
 acttgatgaa gtgaaatttg acatgcgtta attggtgtgc agctctccta attagagatt 420
 ttcaaattct tttactgntg ncacatgaa tggcacattg cnttgctgga caaatnctaa 480
 aattgcaaat tggcttggtc cggaagtttt acgtttgaag ataccctgga tccttaagcc 540
 attccaaagg ngggccantg gaaancaana tactt 575

<210> 9017

<211> 585

<212> DNA

<213> Homo sapiens

<400> 9017

gcatcatcag agggtttttac tgaacttaca accgacttgc ccgctcagta tgcagttcag 60
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 gtctaccaca ggcaaacagt tttctcccca tttttagta atgcgatttt cctattagca 180
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 tcctagcttt caacgcttnc gtaagcagac gacatcttca gtttctagct cttgnagnnt 480
 caacactgca catcaatgat gcatatgtcc agaatcagta ccaagacat tcgaatcttt 540
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<210> 9018

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9018

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ggagatggag tcttgtccg ttgccagga tggagtgcag tggcgcaatc tcggctcact   60
gcaagctccg cctcctgggt tcatgccatt ctctgcctc agcctctcga gtagctggga  120
ctacaggcgc ccgccacat gccagctaa gttttgtat ttgtagtaga gacggggttt  180
cattgtgttg gccaggctgg tctcgaactc ctgacctcaa ctcatctgcc cgcctcggcc  240
tcccaaagtg ttgggattac aggtgtgagc caccacgccc ggccaacgtt ccattttaat  300
taacttaaat acgagcagcc acatgtggcc tctggttcct gccacggact cgggagcaac  360
ccctcctggg cgcggcttat ggccttctc tgtgtgctgc tggggttaag tttgcatgta  420
acctcttgag gacccacagt gtgcattcct aanggggtgcg gncttcggtt tccgtatgaa  480
tggaagaag tncacctgn tgattcttgg aaagagctgt gaaggatggg gtaaactctc  540
cttactgntt taaaaaattt nttgggangn                               570

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<210> 9019

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9019

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aatttttata gcgtctttat ttggatctag ctctttcatc ttgtgtaact cttttaagta   60
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cagtctgaa attctacttt gatctactgc tctcatcttt gaaactgctc taaacactcc  180
cccaaattat tgatcctatg ggctgatta tgaacttggc tcttctgaca atacttctca  240
aatcctgtac ctttggtaac atctctcctg actggcagag taccagaca ctttaattaat  300
gctgatgaaa attaagattt aagcaaagaa gaaattgggtg taagaatgca agccttagga  360

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tctgaaactt gatgactgtg ggatctaact tctgcttctt ttgctacaag ctctgttttt 420
 gaataatcaa ctttcaaaga caaattgctt gatgaatctc tgnattgtca gaatggttct 480
 ttgatttccc atcaaaagcc ctgtatgtgn actagnaatt aggacctacg anctggatat 540
 aaatatcant attttaggag cccttatttg gtttgg 576

<210> 9020

<211> 563

<212> DNA

<213> Homo sapiens

<400> 9020

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 gattccacca caaggctcca aagaaccaag agtgcaaadc agtccatttc actttcactg 120
 tctgagatag ggtctctaag acccaggata caagggtgga atgtagctat atggactcga 180
 tttgcttccg gaccttttcc agagcctttc tgtccaattg tcgctgacga atgatgacaa 240
 gacaagcgaa gatcagggcc acacacacga cagcccttc gaacttccaa aataagcgtt 300
 gtccatcaa agctgagcgg cagcttttga actcatttct cttagatgag ctgcatgtga 360
 ttttctctac atatcctgng ggaccacact caggggtagt tttagcccgg aaattagagc 420
 atggagagcc tcttctggtc caccaaacttt ttcaccagcc acatgggcaa atttgagggc 480
 ttgctgacag gttctttttc tgcacgggag cctntgnttg gcanaacntt tangggnaag 540
 tccngagcaa cccccaaggg ggg 563

<210> 9021

<211> 579

<212> DNA

<213> Homo sapiens

<400> 9021

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atgcatgctg gctcaaaaat ggcagctctc atcactatca atacaaaaac ataaagcaag 120
 acattctctg ccctttcttc ttgtttctgg atgtataaat gaatatttct ctatggagga 180
 aaagtcatga acatgagggt aactccacga cacaaagtcc atggctgact tcccactcct 240
 tagccagatg aaaggtcaca gcttagagga acgggtcttt atgtgcttat gacttggtgt 300
 tggaaggagt tccctgacca tgggagagct cagctctgtg atgatttagc aaagcaattc 360
 agaatgaaat ttggccttgn tatacactaa attaatgtac caaatccacc tacctttcta 420
 gctaattgggg aattatgaag gttgccttgg aagaacaaat atttcccaat agaattcacc 480
 ggggtcccacc aaaacagtca agaatttga gttctggggg gttgcccatt ntcccgaatt 540
 ggaancctac ttaactttat tgggggtctt aaagctnaa 579

<210> 9022

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9022

gattgaaaga ataaatttat tcaattggct ccaatgtaat cctattgtca ccagatcatt 60
 gacaccaa at tggtattttt ccctttgcta gtaaaggat aagcagaaac aattgcaaaa 120
 gaacacataa catctagtag ggataatgat gaaagccaaa aatggattat ttgaaaataa 180
 ttttggaagt aaaaaaacca taggtgtgag gaaaaagag agaaactaca aataaactgc 240
 attgtgataa aacaataaag cacatagcta aaagcctatt aaggattttt taaaaattat 300
 attttgagaa acacttggtg ctaataattt tctcaaaagt caaatatcca aaagtcatac 360
 agaaaataaa acaacctact ttccatcaaa agtttcta at tttattctga gaaaagataa 420
 cccaagaaaa caattttaac tccagaaaca atgggtagcg taaaaattan taatcaaaag 480
 ataaccctgt tntaggnctt acaacttata accatttctt catacaatct catatttaag 540
 gtcattccngg tgatat 556

<210> 9023

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9023

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gtatttcagt agagacgggg tttcaccatg ttggccggga tggctttgat ctctcacct   60
tgtgatccac ccaccttggc ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc  120
cggccgcaac ttatatTTTT aaaataggct tttagatcag ttttaagggt tattttatag  180
ttaactagca gaaaatgtgg attaaaatta cagtaccata ctcaattaaa aatcatgcgc  240
tacataatTT aagttctcct gttaacttct gtttgggttg aaccccgaag tacaataagt  300
gtagattctc attgtgacct acctgcccct tagggcattt tgcaaaaatt anccccTTta  360
ccaattggaa aggcaggTgc cangggcttt atggattTca tttaatctgg aantTTtatc  420
ctattanacn ttgaaactgg gttaaatatg aatngnccaa tttagnaaa tattcatnt  479
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<210> 9024

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9024

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ccaaattcaa ggtcttttatt actagttcca cctcacaagc tagtgggatg tatctgtgtc   60
acaagctgaa ttcctcagta aagaaagctt gagaagacac taaacaagga tgttactaaa  120
agacaatgat ttgttaaaat tataaagcaa tcattcttttg gcctgcaaac agtcaacatt  180
agaactctcc accactgcgg atctggetcc ccatcacagt attattctga atccaggata  240
attacaatca catggcattt ttttctgcat gctttcttgg cccaaaccct gcatgacaac  300
atatacaatt tacaagatgg gacttgaaat tccattctc acacaggata gttagggcgt  360
gttaccaata ataaagaata aaagttatac aacattgatt attataaatt atattngntc  420
ttatccaccc ccattctcct taatatggta ctttctttcc tgcagaaaac atgatggTcc  480
tatntnccan tacatcatta atgatgatta gaatgagctg gtaaagacct tggatttgaa  540
aactgtttgg g                                                    551
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<210> 9025

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9025

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gtttgctcat tcattcggtc atttatttac gtatagatag cttatgacac acagattttg 60
gcgtggctta ttgaaataaa atgaatgcaa actttaaaaa tttggggaac aagtttttaa 120
cattagaata taaaataagg atcaagagaa aacttagggc agagatacgc agccataagg 180
tcttaaatag cttttatagt tgaagcctca ttttgggtta aagcttctgg tagttaaagg 240
gaacaaaaag atagtgctgc agaaagtctt ggactgggaa cctggagatc agatttatta 300
ctgaccagtt ttgtgccttt tggcaaagca ctttatttct atgagccttg gtttctcat 360
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actccagaat ttggagnatc ttttatcctc antantagca catggttaag gggttttttt 480
gcaagncctg gaccaaagtt ttgggggttg cttcttccac cacaagcttg gggcttttgg 540
ccaaccnntt gacttntttg an 562
    
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<210> 9026

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9026

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gtagagacag ggtttcacca tgttgcccag gctagtcttg aactcctggg ctcaagcaat 60
cctcccatct cagcctccca aagtgtctggg attatagttg tgcggcctat gtgcaattct 120
gaaccagaca tgaacgctta aatcagaact agtattgcaa tagctgctaa tatttccaca 180
atgttataaa ttgcaaagtg ctttcccatc tcacttgatt aaaccaagct ccatgctaac 240
agcagcctcc tcccagggtt ctttgatttc atttttactg cagtccattc tcgacacaaa 300
    
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aaccagggtg atcttttttaa aatgttgatc agatcatatc actctcttgc tcaaagtttt 360
 ccagtagatt ccattcccac taagaaaaac atttaaattt ctgntggcct nttagaggtc 420
 tttctacatt cttnctgcan gtgcttactg gcaacagtgg nctttcaatt nctagaacat 480
 gccaacctt gggcttttca caagaacctt ggacctggcc agctttgctt gaacctttt 540
 aatccttttt aaaggg 556

<210> 9027

<211> 394

<212> DNA

<213> Homo sapiens

<400> 9027

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 aggcacctgt agtcccagca actcaagaga ctgaggtgca aagatcactt aagctcagaa 180
 gttccaggta gtgtgctatg actgcacctg tgggtggccac tgtactccag cctgggcaac 240
 atagttagac cctgncnta aaataattaa aaattctgac tattttatta agaaaaaggg 300
 ttanttctta actggtacca nggcccctat ggacctataa nttagcacc tgntccactt 360
 aattcttttt accctggctt tntaaggnet ggan 394

<210> 9028

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9028

ggtggatgag aaggcgtatt tatttttcac tgtacagtat ttaaaaagag aataaaaaaa 60
 tccaaatggc tgtctggctc ctgtgccttc tttgtccca gtttggcca tttgtttctc 120
 taggactgac ctgccctggc ccctggctct tgttttctgt tccctccacat ctgacttctc 180

ttcattgtct cttgtcccaa agatggtctt acttctggga atgactcagg aaacaaaaat 240
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 caccaggaaa ggggttgggg tgggtggtccg ggatgctgcc cctggagaag gtgaagcggc 360
 ccgatgaacg cgttcatggt gtggagctcc gctcagcgcc gccagatggc gcagcagaac 420
 cccaagatgc caacttcgag atctccaagc gcctgggccg cgcaatggaa ctgctggacn 480
 aggacaaaa acgggccttc gtggangaag ncaaacgnt ccggcccaaa ctggggcgaa 540
 tancccgact acaagaccgg 560

<210> 9029

<211> 558

<212> DNA

<213> Homo sapiens

<400> 9029

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 gccatgtttt agctcttctt ggatcgcttc agatctgcca ttcctctgga tatgaacctg 120
 tggccgtggc agaaaccag aaatcagtag gggcttggtg tgttcttggt tgatcttcac 180
 gttaagatgc tattgagctt tttatccat ggatggtctt ccaacaactg catccctcac 240
 agtggcctga gtggaattac cgatatgaga agaagcctgc tccaacacat atgcggcacc 300
 aaaatcaata gctccgcca gctcacgata ttgaccagaa tacctgatgt agccccaggt 360
 gaggagtgtt attaacagta gtccaacct acagttgaac aactggggct acaacctcaa 420
 gacctatgaa gccagtgaag gcctgaggct atgtccaaag ctncatgcc cntgaacaag 480
 acttcagggt gttcggaagg ngctgaaaac gtcttggtacc atgggcttga aaagtctcat 540
 aaatncctgg attcccc 558

<210> 9030

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9030

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ctgaggagga ggggtcccatc tctctcctgt cggctttcac cgaggtcaca gccagacgtg 180
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cgcacctgtt tggttagttt tttacaaag acaggatctt gctgtgttgc ccaagctggt 360
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gcatgaacca ctngccccg nttgagctcc cggttttnaa cactgnacca atctngaaaa 480
actgaccttt ttctggccta caagttatct gaacttaatg ttaggaacaa aaaacnntn 540
tgacaccgt g 551
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<210> 9031

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9031

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atctttggaa ttcatttcat taaggttttc aaaaaatata aagctcaaac gtaatcatct 60
atgtccacca caaaacagaa tcaaataagt ggtagcaca acaaacatag tgatcttttc 120
cattttaaaa aatataaata acaatgttca aggtttttaca gttttcttag tgtgtgtctt 180
tttaaggctt tatgttgcag acccttcatt aatggtaact gtaccctgcc atcaggatac 240
actgccacc agcaaggaag gccactgtgg atacattcct gagggggaca cacactgatc 300
catgttgcct cagcctgtta aaaactaaat gatcaaacac cctncaatca gttctcagtt 360
tcattaactt ctttctctca aagtantaat agaaaggggt ncgtgtccag cagcattcga 420
gtctcagaa gatcaatcag gaagggcann aaaggaaaaa ggcttcctcc tggaaaagaa 480
tttttttctt ttcancagga accaacccea nttaccena angttcaacc aggggttggg 540
cctgaaacat tttcaaataa aa 562
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<210> 9032

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9032

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gtagtttatg taaaaattta tttgaccaa atgtagaaaa agtgatacta ttacatatga 60
tacagttgca agaatctaaa gtgtggattt tattccattg cacaatttgc tagtgtattt 120
cctgggtagt gtggtgctga ataaatagga atagggtggt ccctgggtctc tcctatagtt 180
tgaccaacag ttgacccaaa aggttatggt cttcagcgtt ttaattatat ccacgactag 240
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ctccgtctta agaaagtatg cttactagga aataccctgc ctaccttagg aataaatgct 360
acttaaggaa aaaataagag agctgaaaaa gctggtgcca tttgaaaaaa aaaagggaag 420
gaatgagatt taactgggct caaagcttnt ccgatncaaa atatttgggc atgnnttcat 480
aattgcttgc catttnccgc caaacccaan atggcattac caaanggact t 531

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<210> 9033

<211> 507

<212> DNA

<213> Homo sapiens

<400> 9033

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gagacagagt tcttgctctg tcgcccaggc tggagtgcag gggngcaatc tcaactcact 60
gcaagctccg cctcctgggt tcacaccatt ctctgcctn aacctcccga gtagctggga 120
ctacaggcgc ctgccacctc gcctggctaa ttttttatat ttttagtana nacgggggtt 180
taccatgtta gccaggatgg tctcgatctc ctgacctcgn gatccacca cctnagcctc 240
ccaaagnct gggattacag gggtagacca ctgcgcctgg ccatgcctgg ccaattttta 300
tattttcagt aganacgggg ttttgccatg ttggccaggc tggtcgcaaa cttctgacct 360

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caggnaatcc tcctgcctna gcctccacac tgctgggatt acaggtatga gccccagtgn 420
ccggnccttga atccctctat ttcccccaa agaaaaatgc tgntttaccc nccaacagaa 480
ccttcagga acattnaagn attgcat 507

<210> 9034

<211> 564

<212> DNA

<213> Homo sapiens

<400> 9034

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cagacatgtt tgctgtatca gcttcgtgtt ctttattctc atctgtaagg gggttgatcat 120
gaagcttcaa atagatctct atagcaattc ttgctgcctt gaagtaaaat ggatgctgtc 180
gaagtacatc ttctagtttt aataagtcca catatgatct aagggtaatc ttcctcatac 240
agtatgtatg aaagtcaaac tggatcatcag tgatttctat aaaatgtctc tcaatctcgt 300
gacatttctt aagtgttcca ccaaatttat tcattgcttt ataagcctgg gcacattctg 360
tttggacca catgcactgc atttcattca aattctctac cgctgatgnt ccttccttg 420
gaaactttga gcacatttct tcaagcttct ttaatcaagg tgggctttta accatgnatt 480
ttgcacantt ggaggtggan aaaccggccg gtgggggncca aggnctgggc ctatcatcca 540
ccttgaggt tcttaanatt nccg 564

<210> 9035

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9035

attaaattag ttgctttata aaacattgca gatgtcataa ttgttaacat aacaatttac 60
caaactgtag ttaactggtg cagtttgctg agcatgtttt ataaaggaaa ggaaaggaaa 120

tgccaaaacc ctggtaaagt tgttcattg cagcctaaga gaacaaagat ttgtttctca 180
gacacttaaa tcaggcaaata aaaaataagt ttccctcccc cacctgaagc agttcatcag 240
tagaaatagc ctgataaata actagacagt ctttgcactc gagagattcc acaacatgta 300
atgcaataat ggaaagggtt accttcttta gcttcaaagt tggagggttt tggtcatttt 360
aattttatat caaactaagt gcttttcaag cccgcagtat cttcactctg agataagcag 420
tcttcttcac aatgggattt ttaanatecc cangtccaat ttttagacca aagcantttt 480
aatactaggg gcacacccca tgccctgntg gaaactgggt tttcttggcc aggttttgaa 540
nnanttcaag ggggggttggg taangcttgt 570

<210> 9036

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9036

actcttaact tcctggagat ctttaagaga ttctgttgaa gattcactgg gtattgaggt 60
cccatcttta ttaatttctg caaactgtat ctcagggtgt gatttcacat ttatattgta 120
ctccatgaga ggtggactta gttcttcttc ctcattctgt aactcttcta tttcaatacg 180
ctgactgcct gttattgact gtagagcaat tccttgttga tagcaggata acatcctctg 240
tatgatttct ggtactggta tgcctaggta gacagatagc tgatggtaat caaggagat 300
attctcaatg ggattctcct tcactttgtc aatatactct tgcacatcc caaggcgcag 360
aagaatatct gaaacttttt tccaaattga attgaactgt gactcagtga gaccattcat 420
caaaatctca ctaaggaggg atatccctgn attttgcaca gtctcangaa gntgcanaa 480
tttanaagat gtcnnaaaat ggcgggtcca tattccatcc ttttttgggg c 531

<210> 9037

<211> 547

<212> DNA

<213> Homo sapiens

<400> 9037

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atgagaatga tttatttccg gtctggccag ctctgaaaga gacacatggg ggattcggaa   60
ctttatggca caggcactgg tgcattctgct ctctttgtcc agtcacactt gggatgctta  120
attttcctga tattatacat gcaaatacact tacttttcat agaatttacc attcatcaaa  180
tgactttcaa caataacaat ggtctgacat tctttcatgt cgtactgaga tttcagatat  240
ttattagaga aactataaga cagattttcc taatatTTTT gaagtatgag ttcctctgaa  300
tagttggtat aacatccatt aaaaaataga aaaggTTAAC tttttacat gatcaaagct  360
agagttcaca atgaaacacc tgcatagctc tgcccaacat ctctgtaaca acagccaagg  420
gccggncttg aacatcatgc acagcaatag angnatcatc catggagtcg ancctgtggc  480
ttgccaaaaa tctggnaggn ntaaaacgcc tgaccactga attgggaagt aggaaactaa  540
ccaggtN                                         547

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<210> 9038

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9038

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cttctcttgg ttttattggt tggtagaaaa acaggctctt taacactgaa taaacatctc   60
acgaactgtc gctcctagat tacaaaaagt caaaaccaat ttcctttgac gccggggcct  120
tgaatctgac attcaagtca ccgtaataga aaccagagct gctgaacctt acattctgga  180
aggtgcttga acaaaggcat gttaaggacc gtttaaaact tctagcatgt aagaagatcc  240
atctttcctt ccaacgcctt tggataataa cagcagaatc ccggagatct gctgctgagt  300
ttgagaaggc caagtttaag gattccaaac tccagccttc aatatttctg cagaaactta  360
gagaagtaac ctccccgtcc tctccgctgg cttccccaag tacagatgca ggatgcaggt  420
ctttcttctt gctacccagg caccgaggac tnaaccattt accgncttna tncTgggctt  480
tnttcaatgg gctcttggag gaaaaacttt tcggttttgc caactttaag cccttaaaaa  540
agccttttgg ttaaaaaang gcgggng                                         567

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<210> 9039

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9039

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ggatcttgct ctagtgtag cactcctgaa cttcacatat tctccttgct ccaaattgcaa   60
gggtttactc tcaagagact ctaggctcac tgcccataaa cctttgagtt ggaccaaattc  120
ttaacatccc tgtggatttg ctcatactgc cctgggcaga actctttcct tctttggaag  180
tctgaattac ttcataattg acatctattt tgaaattctg ttttacaggg tttaggatgg  240
gggtaggtag gcacaggaaa gagagtagag cattctctct tttctagcaa tttccattat  300
catgcccctt ctagctttta gaccagcagt tctgagacag ggattatttg cttttgtttg  360
ataggtcagg ttgtctggga tggtttgcca atagaaattc tatagactat tattgntcaa  420
agagcaagaa ttggcttaac tctcttact tataatgtgan gctctggcca tacttaacag  480
acaccccggt ggactaacac agatatggtg ggcctgctgg gctctttcca atgggcccac  540
acaagncnca ggnntcaaan catggcnttt ttt                                     573

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<210> 9040

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9040

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ggctgtgtga agttatcatc agtgcaaata gccgagacgg gaggggagtg gagatgggga   60
acagccgaga tcagcattca tgggcatcca cggtgccgag gtcacagaag gaactgaccc  120
gagagccgtc acagggcggc cttagggttag acttgaagga gaacttcag gtggcagctg  180
ctgaggccag gacggattga caggagacgc ctgggccacg tgcccaggct cacgcctgga  240
atcccagccg tctgggaggc tgaggcgggt ggatcacctg aggtcaggag tttgagacca  300

```

gccggagcaa catggtgaaa ccccatctcc actaaaatca cagaaattag ccgggcatgg 360
 tggcgggtgc ctataatccc acttattcgg aggctgangc aggagaatcg ctttgaaccc 420
 nggangcgga actttgncgt gagcccaaat cgngccactg nacttcaacc tgggcaacac 480
 agnaaaactt cctt 494

<210> 9041

<211> 582

<212> DNA

<213> Homo sapiens

<400> 9041

atTTTTTcaa ccacatttac tagctcacat aaatatttta aaacaaatcc atctgtcttc 60
 ccttttggct tccttggcac aatttatcag ttcttaacaa actaccataa atatccataa 120
 ggggaaaatg aattttagaa tatgaaagag aggttaataa atagccaaat atgtcaacca 180
 ttgaaatgac caccaatttt aagattaagc ccgatttgca acttttattg aaataaatgt 240
 catctactaa aaacaagggt aatttataac tggatctcaa cttgtttaat agcaattgaa 300
 ttttgacata aaaattgcaa aacttcagct aaagaacaaa taaaacattc agacacaagc 360
 ttacacttca aaaattctat caacttcaac aaataatgaa tgactgnata ttaatttaca 420
 ttagtcctgt ggtctagagt acattttcca tttaaacatt tttaatagaa cttctgggat 480
 ggcatggaca gcttctagtg ggnaatagga tatagtccgg tcttgntgga agacaccctn 540
 gacaggatgg tggcnggaag ccngganaaa gcctgaatgg gn 582

<210> 9042

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9042

gagatggagt ctcactctgt cgcctaggct ggagtgcagt cctgcaatct tggctcattg 60

caatttctgc ctcccgggtt caagtgattc tctgcctca cctcctgagt agctgggatt 120
 ataggcatgt accaccatgc ctggctaatt tttgtatttt tagtagagac ggggtttcac 180
 catgttggcc aggctggtct cgaactcctg acctcaagt atccaccgc cttggcctcc 240
 caaagtgcag gattacaggc atgagccaca gtgcctggac tcatttattg attcaatcat 300
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 ctgctttatt ttgttgctca cactgtttca gcttcagcca ctgggaacat cttccctctg 420
 catgcccatc tcacatcact gnatgtataa agttctgnct tgctctctga ctctacaaga 480
 tctcagctta tcttggatac tttctggcct aagtttataa tcagctattt ttcaaggaac 540
 cctggttcgt ttaatggaaa anggggg 567

<210> 9043

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9043

cagtagagga aaagaaaact tattaatgat gccaaaggcaa ctagttaagg caactgaagc 60
 ataaccttgt ccacattcac taaaattcca gaaggaacaa atattttaa gtaagaactg 120
 aagctagggg taaattattt ttaaaatatt ggaattcaca aaaagccatt caaagcataa 180
 gatccagagc acagaaaaaa tgagtaatac atctgactac tacataagta ctaaaaacat 240
 gtccatggca aaaaaaaaaa aaaaaaaccc acagaaaaac aacaacaaaa cagaaaaacc 300
 accaacaaaa tgaaagtaag tgacaaatcg gagggaaatat ttgcaacata tttgacaaag 360
 gactaatttc cttaatatat ggagttcaaa cagattaatg aacatgatca acaggctggg 420
 tgcaatggnt taagcctgna atcccagccc tttgggaagc tgaggtgggg canatggctt 480
 gggncaggga gttcaaaacc agcctgggca catggnaaaa tcccattttt caaaaaaat 540
 tnaaaaaatcn cnnggg 556

<210> 9044

<211> 548

<212> DNA

<213> Homo sapiens

<400> 9044

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aaaaagacag agtctcactc tgttgctcag gctggagtgc agtggcgaga tctcagctca   60
ctgcaacctc tgcctcccag gttaagcaa ttctcctgcc ttagcctccc gagtagctgg  120
gattacaggc acccaccacc ataccgggt aatttttgta ttttagtag agacagggtt  180
tcgccatgtt ggccaggctg gtcttgaact tctgacctca ggtgatccac ccgccttggc  240
ctcccaaagt gctgggatta caggcatgag tgagccactg tgcttggcct gattttcata  300
tattaaatga cctttgcagt cctgggataa atttacttg gtcattgtgt ataattgttt  360
taatattgct ctggatttag tctgccagca tgttgctcag gattttcgtt cctggggccac  420
aattctagac acaccctggg ctggaaggga acccactggc ttgaaggaaa ggaccccatc  480
ttggctgnat tcatggctgg ttaactgaan aanccttngn ccctgaataa ccngcngaaa  540
tacctggg                                     548

```

<210> 9045

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9045

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gacatgcttt ttctaaagtc ttttagtatg ttctacagt atcattctca agtcatataa   60
actacttget gtggtactaa gtatttaaat atagatgtgc tatcaacact ttcttaactc  120
tagaatatth tttagaatat tcttcaacat agtatgatgt caatgcagaa atgagaaaag  180
aactaaggat ttacatcagg ttacaatata ttaatcaaaa aatacatttc tgtgcctcta  240
tgaattctta atattaatth ttgcaattht acaaaatctt actaaaaatt ttggtatttc  300
tttcctata ttcttcaaca atggatataa gtattgttag tgcaaccagt taacagcaac  360
actctgacgt gtttcataaa aacctatact attttataaa aaatccctth caaaataact  420
ctttcaaagt aaagttccca aaaaggthaa tttaatccct gtnacatac ttcataaaag  480

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gtcagatatt ngcaatattg ccaaacttta cggacctaata aagaagctnt ttaaagcacc 540
gggggtttttt nccnggttat gcceng 566

<210> 9046

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9046

ccaatttgta attgtggaca agtgtaacct acttatttgc tagaatgatt ggatctagaa 60
tgagccataa ccttgaaggt cgtctgaaac aaactcctct ccaactgctat cgttttctgc 120
ttgactcaga aagctctttc ttccctggtg cctttcccag cagcatttgg gcccatccat 180
tactagagca gcaagtagag gttttggaat cagagagttc tgggtccgag ttgtgactct 240
gtactttact agatgtggta tcctgagcaa gttacccaac atctcttctg taaatgggta 300
tcatcaaaat gaattcctag gagtttgagg attaaataat gtgtatagta tacacaaaat 360
ctagcattca gagctaaatt aagagtagct aagcagttca ataggaacta ggacccatgc 420
ttcctgtttg actcttgagg caacactttt ttccatggaa agatctggct ttcttacaat 480
ggctataaaa cctttgaaaa agcactggtg ctggaanact gggngtactn gcttggaaat 540
aataccattc ctacattntt ta 562

<210> 9047

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9047

aaatgtcata nngtttactn tattttaaatc ctgaggttna aaataaagta tttccacatg 60
gcatggcaga cactatgaaa taatatgctt anggatacaa aagttttcca ccccattn 120
gcagggtggng tgctggtatt tgatgtgctt ntagataatt ctttggcaga taagaatgaa 180

ttgggggtccc agaccaccca tcccgttaagg ccacatgaat tgaggattaa tcaattaaag 240
 tgcaattcca aatgttgagc cttccaaatg aggcttgggn attgctctgc agccaccana 300
 ggcanagtgt ctctgcatan catacatnaa gcagcctttn tcttttttta aatcatagat 360
 gcccccccaa atttcaagat gtactttatt attntaaaag tgcttaagag gaanganaga 420
 nttattaatt cagnctctcc tggntccttg gaagaaacat aatganatg 469

<210> 9048

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9048

canaactgta tttgttattc atacatttgc gttggtttta ataccattacg tacaatttct 60
 acattggatt agaagaatga cacagggggc agcaaacactn tcgcagccca gcctccattc 120
 cctgacactg gaggcagggc ctatggctgg canagggacg gngttccatg agtgccactc 180
 anaagcctcc cccggcattc tggggccctg gctnttccan agtccacatt caaggcaacc 240
 tgagcacagg cttgagggan agtggagaaa ggccaggaaa ggatgccac acntttgcct 300
 gccaggccca ggaccagctc tctcctacac tggacceaat ttccttctga tcacagaact 360
 ggtctggatc aagacaatgg ggaaaactgg ngtggaagct gtggccagggt gaggcaaccg 420
 ggcttcctgg taaaccccca ggcttttttg agccccanat gggcacttta ccaacagggt 480
 tgggtaaaaa tgttacngag agctttgcc acctngggcc ctttgggtct aaaannaagg 540
 ggcaanggtt ttttaaaaat tgncc 566

<210> 9049

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9049

gagacggagt ttgctcttg ttgccaggc tggagtcaa tggcgcgatc tggctcgcc 60
 acaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcctca gtagctggga 120
 ttacaagcat gcaccaccac acccagctac ggtgttttct ttagggaagc tatttcatca 180
 actatatctc agcttccacc caacctgttg attatccctg aggctttgta gattgcaaca 240
 cggccgcttc cctctttaga ctggccatct ctacggctctc gggcatacat attcttctct 300
 gagaaattgc agccctggaa gtcgaagtgg gctgaattca aggagatgag ctttggatat 360
 agcatgtttt ccacctgggt gctctcatca ctaaagctgt ttccgtacat gaagcagccc 420
 cttttggaag catgtcatgc aggtccacat agtaagcaac gccactctct tttgggggga 480
 tggnatcang ggcttgactc tttnaagccc cgaaactggg ggggcataat ccacacctgg 540
 tgaacttttg gtctggtggc tctggtggtt ccagct 576

<210> 9050

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9050

ctgagataga gtctcgctct gttgtccagg ctggagtgca gtggtgcaat ctgggctcac 60
 tgcaagctcc gcctcctggg ttacttacg ccattctcct gcctcagcct cccgagtagc 120
 tgggactaca ggcgcccgcc accatgcctg gctaattttt ttgtatttta gtagaaacag 180
 ggtttcacca tgtagccag gatggtctcg atctcctgac ctctgatct gccgcctca 240
 gcctcccaaa gtgctgggat tacaggcatg agccaccatg cctggccaag agtggtttct 300
 aaaatatgag cccatgggat ggctgagata ccagttgatc ataatggagt ggggtactgc 360
 aagtatttag ggctggcaag tagggaggtc tgaggctctg aggggagggg ctgggtcaac 420
 agacaggctc atanagggtc caaggcagga agtgttttaa taatgttaac gagtagcatg 480
 gcataccgga acacncgatg aatgtcacct ttacctcaag gatttccgga cctnaaagct 540
 attcaaggca tccagttaan tggnt 565

<210> 9051

<211> 580

<212> DNA

<213> Homo sapiens

<400> 9051

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cattttatatt ttanagaggg gtcccactat gtcaccaga ctggtctcga actcctggcc 60
acaagtgacc ctcccacatt ggcctcccaa agtgctgaga ttaaaggagt gagccacat 120
gtccagtctc tttticttat atgcaatact cattatagag ctagttgngt tttcctgcaa 180
ttttcttgat acccaaaatg agagcaagtt taacttaaaa atgctgcagg gtttatgcaa 240
tgcctatcaa tgttacaatt ctgaccact ctccatattt attactctca gtattctatc 300
tgtatatttc cttatcctat tttaaactgt tttcattttc ttgtttaatt gtatatgcat 360
ctatgtattt atttccttga aaactacact tgcataaggi agtttttaaaa attaatgacc 420
actggttcta cactatgcaa aatatgcaan ggaccggact ctatacaggt atctacaaaa 480
ctaaaaaaaa aaaggggntt aataacttta aaaagcccta caacctttta aaaagccctc 540
ntttnaaaat atttcatatt aaaagnaate aacccccaca 580

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<210> 9052

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9052

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aggtttgaaa tatctttttg caatagataa tcttatttac attaatacag aatcatttta 60
cattcctaaa tcagacacta atagatgctt tatttttagtg aattataaag gaaaacaaaa 120
aggaaactgt tgagaagtgt tcttcattaa cctgtctaac gacagcccga agatcctgaa 180
acacatggaa actgcgacat gctaccagag ctggtgaggg tgacgccgtt caccgtcccc 240
tccacatctg tctcgtcctc ggcgtagctc aggatcaggc tctgctgccg gctcgttagc 300
ctctttggaa ctcgtatctt gatgtggatg tagtggtctc cgtagccgta gctgttaatc 360
cgggggatgc ctttcccacc catccgaatc ttctggtctg nctgagtccc aaggggggat 420

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cggcacgttg atcgcttgta caggccctgg gcttttggtt gacccccag aaaaagcctg 480
 ggctnttnna ataanaaggc cgaaatggat gttggncccg cttcngaana aaagggtttt 540
 tttgg 545

<210> 9053

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9053

aatgtacggt ataatttatt tattaataa acatttatta ccactataca cttctagaat 60
 gaggtggatg gtaaatcaaa taaacataaa gcaatattaa gtacctaccg tgtgcaaaag 120
 caaaaaaaga catggtcctt gccctcatgg agctcacagt ctagctgaag cagacaaaca 180
 agtcacaaat acaatggcaa agcaccaggg aagcattatg gaggaagga ttggttctgc 240
 ctggagtatg cagggcaggc ttcccagaga tggagacaat gaagctgggt cttggatgag 300
 taggagttca ccagatgaag gggaagggg taagcacatt ccaagcagag caaacagcgt 360
 atgagcaagc agagtcttga aagcgcatgc catggtgcag gacgatgagt gttccagcgc 420
 actagagcag aaaagtgccc caaactgaag agatgaatta ntggttgggg ttttgatgaa 480
 acataagtgt cagaaaataa attgcccatt cacttacata acttaactgn gggtctggna 540
 cagtcctgta tcttaaaagc ctttnattca tnaann 576

<210> 9054

<211> 572

<212> DNA

<213> Homo sapiens

<400> 9054

agggaacaa gattcatgtt ttatttcac agagaaactc aaaagtagga agctcctcct 60
 tcctggagaa ctgtcacagt gacttcaggt caccaaaggg aggaggtaca gaaagatgct 120

ggtgtatgtg acgaggctgg tggccactga agcaccacag tgcagtggga agaaacaagg 180
 agagacaagc tgggtcccca gcctaggaaa cagaggtgtg gcagccgggc cagggtgtgc 240
 acaggctggg ggccaagggg aggagctccc tgacgaccag tgcttttcgg ggcctcggtg 300
 gtggttgcaa gaaattgcct accaaaaactt caccactgc agcaggccag gttgcacccg 360
 ggaagccgag gaagaagggtg agactcccc ctttgcaggg gtcttgactg agtacttccc 420
 accataggca gtgggatacg catgctggtt gtaattgtag ttctgatcgg ttttgcctgc 480
 acgtttcttg aatgatgacc cgtccgacct taataaatgg ntttcaantt gaggaaagga 540
 tgtctgtttg aaatcctccc aantcggttg aa 572

<210> 9055

<211> 493

<212> DNA

<213> Homo sapiens

<400> 9055

ccaatgaatc aacatacttt attagacca ctaagtgccg ggggaggggc ctgtgcccta 60
 gagccagggtt acagggtcca cccgtagatt cagtctgggc tctccccatc atgcctctca 120
 cttccagtct gggctttctaa taggagggcc cggacttctt ccttcccagt cattctctcg 180
 aatggagaat ctttctcat tccagggaca ccaaggctca ggaaggggcc tatccatcat 240
 cagtagagcc agacaagctc tcccatcgga cgtcctgtgg cggggcccag aaatgggtgc 300
 cgctgcctgt gggactgccc ttccgggagg accagggtgt cttcagtgt cttggcctgc 360
 acgtggagga nagtaggcag atgtctggtg ctctttaagc tcaaaggcat catggccctn 420
 tcggaagcag cgggcacaga aaagncccca ttgagccagc gcancgtang gnggcatact 480
 cantgcanat cca 493

<210> 9056

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9056

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gttaaactat acactcttta ttattaatgt acatttatga aaaattctgc acagttacaa   60
aagtgcattg ttataaaatc atctccatac aaaggttggc atcttccttc taaccccacc  120
cctccccagc cctcccaccc ccagacatta gcacattaca ggacagtgtg tagaaaaact  180
gagagctctg tggatccagc tctccgcca gtgctgtgac aaacacaata gtgatttaca  240
aaagaccttg tgacgccctc acttcctttt tgcctcttcc tggggtgggg aagcgcagac  300
aattttctct ggcttttaga agatgtcctt ttgaggaatg ggtaagata tatcttttta  360
gtcttctact gctggaaagg atgtcagcac agacacgtat agggggaaaa tgggagctgg  420
angncttccc catgggtgaa gacaaacacc tgncttggac tgggtcaaatt ttcatacatg  480
tccctcctcg aanggagcca tgaaccttgg agcaacttgg agacctattt tgcaaagttc  540
ctgggaatt                                     549

```

<210> 9057

<211> 488

<212> DNA

<213> Homo sapiens

<400> 9057

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gaaaaagtca tgaagcttca aatagatctn tatagcaatt cttgctgcct tgaagtaaaa   60
nggatgctgt cgaagtncat cttctagttt taataagtcc ncatatgatc taagggtaat  120
cttcctcata cagtatgtat gaaagtcaaa ctgggtcatca gngattttct ctcaatctca  180
tgacatttct taagncttc accaaattta ttcattgctt tataagcctg ggencattct  240
gtttggaacc ncatgcncctg catttcattc aaattcctnta ccgctgatgt tccttcctt  300
gnaaaccttg agcacatttc ttcagcttct ttaatcaggt tggcttttag catgtatttt  360
gcacatttgg agttgataaa ctggctgctg ggtccaangg cctgggccta atccatcccc  420
ttgnaggctt ctttnaaant tncagctgct tatagatttt agcttcncga gaaagagttc  480
ttttaang                                     488

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<210> 9058

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9058

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gagaatgtga gattttttaa aacaaagaca acataattca ggttaactct gttgaacagt   60
caataaatga aattcatcta cacctgaata aaacatatatt aacaattgaa aaaattttta  120
acaaccacaa aaagtaaaaa ctttaaacia acatgaacag gatttgtttt tagggcacac   180
aaaggccctt gcagcagatt ccaacagtag ctttactggg gtgtcttcta cagatgagtt   240
aaagagacag gctgagctcc acacaggcaa gatgactaac agggcgacag gacagtcaca   300
cagggcggag tgccacaccc ggctataatc cccagattcc actgcagagc tggctttgtg   360
cgtaggaggg acacaaagaa aggtgattca ggcagacatt attcaaagct acttcgtcgn   420
gtaccattgg aataatgggt gggnaaactt ttgggctttg gatttttttt taagttttac   480
tccttggtat taacttctta atacangncc ttaaacttat gccgctgcaa aaacctatgc   543
cgt

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<210> 9059

<211> 495

<212> DNA

<213> Homo sapiens

<400> 9059

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cagaccagct agatattttt attaatgata tataacctct ttaaaacatg tatatttacc   60
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tttttgacct tccatacagt caggttcctc ttcagtgtgg atgtttccta acgaccaagt   180
tcaagggttt tccaacatct ctttcaactc tgggacttct caatgngtgc tttgacatgt   240
tcccaaagng gaagctaaaa acaaagaaga atctccacac attttacatt cataagattt   300
ttcacacttg tgagatcaca gctgaatatt aaggtataag gcagagtga aggttcaaca   360

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cattccttac agccagangg ccgtgcattt atatccaagg gtcacaagc tcaanagggc 420
cccnggaaaa aatggaaggt ttttccctt cttacaatta tagnanttnt nttcagcatg 480
gggtcaaacn ggctc 495

<210> 9060

<211> 409

<212> DNA

<213> Homo sapiens

<400> 9060

cttttttttt gagacagggt ctactgtgt tgcccaggct ggagtgcaat ggcgttaata 60
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ctgggactat aggtgtacac caccaagctt ggctaatttt tcatttttca tagagatagg 180
gtctcccaat gttaccaag ctggtctgaa actcttaagc tcaagcgatc ttcttgcctt 240
ggcctccgaa agtgctggga ttataggcgt gagccactgt gccccgccga tttatatatc 300
ttcttacatg atacatctta ttatcaattg acaagctgnt cttttacttg aaatttactc 360
tttgggancg taggncccaa ngcttggggg gggaanggcc naagtnctt 409

<210> 9061

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9061

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gaggntcatt ttccattcc tcaaggnaag ggtagactac ctaggaactt attgcatctt 120
taggccagct ggcttanngc taccaatntg aacccccana ttactacca agtcttcctt 180
ttgcccttc ctgccctaac agcaagtacc aggccagtcc cttccccagc aaatgccagg 240
ggcttcatgt gaagaggaac tggccacaag gctgagggga ggaggagaaa ctgtttctgc 300

aggaaggaca gcagtgcctc caggctnttg ggcatnttca catgtttcta gataaaggac 360
 aagctcaact ttggagcctc tggtaggcag aagaaaggag gcaagggaag tatggcctgg 420
 gctttaaaan acccggttnt ctnggatgga tccccagatg acnaaaggca aggttcctgg 480
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<210> 9062

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9062

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 acattttggt aaatatttaa aacttaattt tcataatgaa aatttttcaa gatagtctct 180
 acatatgcct cctccccact taaattattt aactcttgaa ttttgatctg ttttctgttt 240
 taagaagctc ttttctactc tataactaaa aattcaaatt tatgaatcag ccagtatccc 300
 ctaagtgact atcttgggca aaactagtaa atgcccatatc tgaccacaat tattataaat 360
 aattaacata ttacaaacat ataacttttt tacctgtaaa taccataaa ttaggtaaaa 420
 tacaaaaact ccagcaacac atatgaaaaa ctggagnagg ttggtaaac ttgctggaga 480
 ttcattggcca ggtcccacaa cggnggcaac tggcttggat gnggggggga cattggttng 540
 ggtttt 546

<210> 9063

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9063

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 tacaggcatg tgccaccacg cctggctaata tttgtatttt tagtagagac ggggtttctc 180
 tatgttggtc aggctgggtcc tgaactcccg agctcagatg atccgccac ttcagcctcc 240
 caaagtgtg ggattacagg cgtaagccac cagccccagc ccatatttca gatttttaaa 300
 taaccactta cttaaaaaaa aaaaaaaaag aaaaaagaaa ccacatagtt gtgattcaag 360
 aatcttcaaa tctatgcact tcaaactgaa gcaaatgaaa tacgtaaaaa tgtcgagtta 420
 atcttcttgg ctctttctna aatcaaatta caaactctta acttcnggat tagtttccca 480
 aattngnaaa agtagtctat tttaccncc aaaaaggggc cncatttntg 530

<210> 9064

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9064

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 ccatccatta cagggttacc aggaggcaaa ttttatctac ataaatattc acatgaaaat 120
 agtaacttac aaaaagaaaa aaaataaggc agcttcataa cacaattatt cttttacact 180
 tttacaata taactcctcc cggtcagaat aaatatacac ccaatgtatg gagcaggatt 240
 caaagtggat agtggcttgg ggggtgcttag acagtgttat cgcttgggac ctggagtcct 300
 gggggaggca gtggtggtct tcttagacat ggttgggatt ttggaagggt tgttttagccc 360
 tctcctggag ttgccttggc cccctgcagc gctgctttct gaagtgtcgg aacaagcaga 420
 ctgcgtctct aagangtcaa agtcagaacg tcaattnctc gccggctgct gggctcgact 480
 ccgggtcgat tccannccga ctccaaggcg actggnagac nttttanggg ctgccnaata 540

<210> 9065

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9065

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atgttttttt ctgtcagttt aatccatttt attgacttct caattaacaa caaaattcat   60
ttggacagta aatcagaaaa tactttctat ggtggcttta aattacattt ttttaacccaa  120
aaatgttata cagagccatt ttagacaacc aatgtatctt aagtacaaac ggtaaaaatt  180
cacattccct tcagtaactc tccttccact tagaacacaa tgaacttctt aggtaggcag  240
agttctcggt cacttaacca caaccccat ttagcacaga actgcagcaa aaagaattga  300
agaagtgatt agaaaggata tgcattatta ataaaccata tgctatgtga gtgttaggtt  360
cccacgaaat attttactgt atatttaaaa aaaaatccct tctcaagggc actgctttca  420
ttcaaggact gatttcatta cctacttcat tatcttttat aggggaaatg ctccttttca  480
aggtattaat acacactgga gttggtacca ggnaacactg gnctacacct ggaggttaaa  540
atnttagtgc ngg                                                         553

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<210> 9066

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9066

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gagacagagt ttcactgtcg atgcccaggc tggagtgcaa tggcatgac ttggctcgcc   60
gcaacctccg cctcccgggt tcaagtatt ctctgcctc ggcctcccaa gtagctggga  120
ttacagacat gcgccaccat gcccggttaa ttctgtatit tcagtagaga tggggtttct  180
ccatgttggt caggctggtc tcgaactccc gacctcaggt gatccgcccc cctcagcctc  240
ccaaagtgtt gggattacag gcgtgagcca ctgtctcttg cctgggtctc ccatttctag  300
ctgacttttg gtgacacaag acagctgagc acatgcacct gcgcccgtc atgcacaaga  360
ccctcctgca accacagcaa aggagggacg caggtgtcaa ccctgaagga cacaagaat  420
gggaaagggg aaggccgcan tgggagacct gtggcatttt cngagagatc ccgatgaac  480
gtncaggaac nggctttgac tncatagagg aggggttccc nccaagggga agggggtttt  540
cttaa                                                         545

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<210> 9067

<211> 557

<212> DNA

<213> Homo sapiens

<400> 9067

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acaattttta atttttttta agacagtgtc tcactctgtc gtcaggctg gagtgcagtg   60
gcgcaattag aactcactgc agcctcaacc tcctgggctc aaacaatcct cccacctcag  120
ccttctgagt agctagcact acaggcacac gccaccacac ccagctaact ttttgtatTT  180
tttgtagaca gggtttcacc ttatttctca ggctggctct caacttctgg gctcaagcaa  240
tccacccgcc tcagtcaccc aaaatgctag gattacaggc gtgagccatt gcgcccagcc  300
tcaaaactct tctacctaaa atcaccttca gagccatgct agaaaattag tatcattcct  360
ttacaatcgg aatccaactt ggccactaaa atgtttcctt agacttggtc ctaaattgatt  420
tttgattgtt ttcaaaacct gaaaaacacc ttcacaggat aaagattaaa gaatgggcca  480
ctggatctga gaacatttca aaaagaagtt ggacttttaa gcttttgcca attccnggga  540
aatggctttt ccanatt                                     557

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<210> 9068

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9068

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aaataacaaa atatatttcg atatgcacag ttttaactga ggacacacaa gccttcctcg   60
ggctgcaggc ccaccgccct cccagtggga ttcacagccc ctgcggagtt tgtcctcagc  120
cacaccacac acgatcgggt ataaaacaca ttctataaac acgttctgat gcaaactgtg  180
tgtccataaa tatatatTTa tgcaagttcc tcccaccacac tgcagggccg tacagctctg  240
gggacaggag gtcacagccg actttaaacc gcaggTTaag tagaaggTTg caggTcaaat  300

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agaagtcccc gtgtgattgc atcacccaac ggcactgttc tgtcatcagg aaatgctgag 360
 tgcccgccgt ggccgggtgg gcgcgggcgg tggtcagacg ctgctctgga gctggctatg 420
 gcaaagaaga ggacgcccag caccttgtac aggagcccca tgatgaagta ttgtanccgg 480
 ntntatggcn nattntggna cc 502

<210> 9069

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9069

aagaagtgca tattctttta tccaggaatt actcaagaaa tttatacatt ttttaaaaag 60
 atcaccaa at gcatcccaca tagttccttt acaataaaca aaagataaac aacctagcgt 120
 cctgtcctat atgcgctcta ccagatgact caattatatt ccatccatcc atggaatcct 180
 agacaatcat aaaaggacat ttatgttaac atggaaagtg aagatacgt ttgaagaata 240
 ggctacaaga gagaatacat tacacaatcc tactgtctgta taaaacaaaa catctggaag 300
 aatctatgct taaatattaa tagtgtgtcc cgcaaagtgg taggataata gtgactttta 360
 ttctttttac ttatctctat tttctcatgt ttctgtaatg aacatgtttc ataaaacaaa 420
 atgggtctgn tataaaaaatc tgaaaacttg gttttgaaag agagcagtat tacaggctgt 480
 aagtggcaaa taaaatttna tggtaaatat tccgcttccg gggaaataac cccattntta 540
 nta 543

<210> 9070

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9070

ctaatacatg gggttttctt acattgtcct ggccgatctg caactcctgg gctcaagcaa 60

tccttccgaa agtcctggga ctacaggtgt gagccaccac gctcagcctt tttttcctta 120
 ttactgtact agggacattt gtggcttttc cacaatgaga cttagtagag aaatgacagc 180
 ttcccttggc cctatcctga aatacactaa ctagctcttc tctgccaggg ctaccgtttt 240
 ctccctaacc tttgcagatg tatgtatcca tataaatggt tctatttcaa caaactgtag 300
 aaagtataca gtctgtacag ctccccttat aatgctatta cctgatgatc ctgactacaa 360
 gtiggaatta tctgcatact tggcaaaatt caagtgtggc tgcctatgcc tcgagagaat 420
 gagcagcaaa ccagcccagt cctaaattcg aatagcagct cttaaagaga atanggagct 480
 cttggaangc tttctttang actggatatt caatttctgg gcttancccc ngggttaatt 540
 ctaccaggcc attttgaggg ga 562

<210> 9071

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9071

ggatttgtat gtaatcttta tttcttactc tgagctccag ttagaaaagt ttgacaatca 60
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 tctatgcgct ccctggagag ggagcaactt gctaaggtag agtcctgtcc attggcatgg 180
 atatttattg ttccacatgt tgggaaaacc atgtgcaata aaaatcaaac atatgaaaca 240
 atggctgtca ttgtaccaca gtatacattg tatcttgggtg aaggttctta aattactcct 300
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 gcaaacactt ttgctttgct agttcttgta ttagatcttc atatacttgc aaaaagaggt 420
 cctcttcaga ttttgntcca tccaggtcac aacttccatg tgatgtcctg catttcttgg 480
 ctgncttttag atcctgggca cacatnggcn ttaaaagatt cccgaaagct tggaggntaa 540
 aaanccttt. 549

<210> 9072

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9072

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cttatggatt ctttattgaa tcacaaacaa ctcagggcac caggccccag cagctgcatt   60
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tagcttttca ctatatagag taaaaacatc agaaatcacc ccaagagaaa ggacatacca  180
aatgcccacc agaagggccca gggactgcaa gccaccctga gcgcaggagg gtgtgggtgaa  240
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attctcacc ccaaggtgac agtattagga ggtggggcct ttggagctga ttgggtcatg  360
ggggcgggtgc cctcatgaac agggttggag tccttataaa agaggcagga agaggatgca  420
ggcgttgacg ttgntgtana aagtcaggcg ccanatgcct nccgtcaccg gcnggagccc  480
tttgnggggg aaan                                     494

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<210> 9073

<211> 534

<212> DNA

<213> Homo sapiens

<400> 9073

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aagctatttt aagtataaac tctattcctg aatatcttca gatactttct gctagttcaa   60
ataaactcac acagacatta atccaatttg aataactaca tatgaatgag gctacagtat  120
tattcaatcc agagtgtgtc acttccgttc atgaaggctt gctatgcata aatataaaaa  180
tattttatct tctgatgctt tcatttttga agcactccct tcaaaggatg taaaaaata  240
ttaaataaaa gagctttcaa agtggttctgt taggctatga tttagggggg agatgaatgg  300
aaatggatat tgatagttat ttaactggag atctttgtgg tgatatgtga aagtataaac  360
taactccaac aaactcgttt tticctgaaa cttttggtgt aaaattatat attattatta  420
ttttgagaca gggctttgct ctgttgccca ggccaggctg gaatgcaatg gcatgacctc  480
ggntcactgg ccctggcctc cgggctcaac gatcttccat tcagnccant ccan          534

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<210> 9074

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9074

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atatctatta gtaagattag caaagatact gttgctatTT ttatatttgt ccttttaaaaa 60
ggtaggccct tctccactta ctcccatatc cctagagaaa tagatatatg tactgtttgtc 120
aaaaaaaaatc aaacacacaa atactggaat attaaaagac aggctcctca tttctttctct 180
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attatagctc tgggtcacta acttcttttt atgaaaacat gaataatact agttataact 360
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gaatattgca gaggctcatc ttggaacaag aagtagaatg ctggttcagt taagaggact 480
gggctggTtc aaggcacaga ctgntcantt cgcatnacaa gtggtggctg ggggttttca 540
tcaggcatta ctaatgggna tggga 565

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<210> 9075

<211> 381

<212> DNA

<213> Homo sapiens

<400> 9075

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aaatctcatt tctgtttttt tattgtcttt tatgttaaac tttctacaaa aggatgtata 60
aacgggtaag taganaatct ctatctacaa aatgttttct cttttaagta ttacattact 120
tggtgtacat ttaatagact gacatatata agcacataaa aatcatttta cgtaatacgc 180
tgcgaaatac gttgactcct cctccgcctc acccctgaan tgcctcctcc tctatcctcc 240
ccatcacttt catcatcttc tgtctctgct gctgtattat ttttagggnt gcctccnccn 300

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agcagtgagg tnattgcttt gttccnagca tttgtgctag ctgaaactcc ctttcttctt 360
cttcttcacatc agggtcctaaa t 381

<210> 9076

<211> 568

<212> DNA

<213> Homo sapiens

<400> 9076

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aggagagag aggttaaata ctttaattac taacttgcaa aaagatttcc atttgaatat 180
ggaaacaatg taaaggggtc cctaattttt gtgggactgg aatcactcca gaggatttaa 240
tgatactgct gggcaactga aactgtgcaa ctgaataatg tgatttctaa gcatatttcc 300
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gcnaatttgt aggggagagg aattaaaaca gtgatttctt tcaatgatac atttttcatt 420
ttctatttta aaacgaaaac catttacttt tgagtcaaca ggcatgtgac anaaagtgct 480
acatanaaan aatttcccca ccaaggactg cctggatggtt acttgaaaaa cncaggtta 540
attatttctc cncctttaaa acatactt 568

<210> 9077

<211> 343

<212> DNA

<213> Homo sapiens

<400> 9077

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caaccatcat gttcttaaaa ctttgtnact tgcagtcnaa tatatggatt cnatatagta 120
caaacatttc cctacatcaa tcaccttcag ttggaaagtg cctctccnta aaaaganatc 180

aaaactcacc ttccaggtag tgattactgc gtnagtttca tggaggaaaa aaaaatattt 240
ataaatgtga aattgcctct aaacaagggg naggtgcatt tcntcnctt gtttaaaaca 300
ataacatgaa gatcacceng tttgtcttc tcnngtgaaa agt 343

<210> 9078

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9078

gagagggagt ctcactctgt tgcccaggct gggagtgcag tgggcgcaat ccacctcctg 60
ggtttacgcc attcttctgc ctcagcctcc cgagtagctg ggantacagg cgcctgccac 120
acgcctgggc taattttttg tatttttagt agagacgggg tttcaccatg ttagccagga 180
tggtcctgat ctcctgacct tgtgatctac ccgcctcagc ctcccaaagt gctaggatta 240
caggcgtgag ccaccccgcc cggccatgtt tttcatctta attcttctat tgattaaaaat 300
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cagctgatag caaataatta attataccag aatgaaaagg cagaactgct ccaaatgcac 420
aaaacttanc tagcactaaa anaaatactg aattttcccc catagtatat aatattttat 480
tggaacaaa aatattttaa tgaatttcnc agctatatatt acncataggg tncgcggan 540
aaggaaanat tgattacctg ac 562

<210> 9079

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9079

ctcttctgaa ataggtctc actctgtcac ccaggctgga gtgcaatgga gtgattcacg 60
gctcactaca gcctcgactt cccaggctca aatgatactc ttgactcagc ctcctgaata 120

gctgagacca caggcacatg ccacgactcc cagctaattt tttttttttt ttttaaatta 180
 gagatgaggt ctcactttcc tgcccaggct ggtctcgaac tcctggcttc aagcaatcct 240
 tctgcctggg ccttccaaat tgttgtaagt acaggagtga gccattgcac ccnnccagga 300
 aaccanatt canaaaggat atctgtctag agaaaaatct cattcagtga atttaatact 360
 tacatacaac tatgacttgt aagtccagaa gttttagggt aagaaaacat gtnnccattg 420
 tncccaatgg agaattttaa gtcfaatgtt ttttggtggc tccaagatca agccaccatg 480
 tttatcacct tatcatanaa accaaatttc ctgaanantt gcccn 525

<210> 9080

<211> 347

<212> DNA

<213> Homo sapiens

<400> 9080

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 ttcagtcaaa atagttatct cacagggtgaa accactaagt agcttacttc ctacctttta 120
 aattaataaa gttacagtca gccacattgc ttgagtcttg ccaaaatctt tagagaaaca 180
 acacaaaactc agacatctaa gtcagatcaa attanagccc aatatttttg atacttttat 240
 tgtatatgac tagttttcta naaaactatt ccanaanata cagtcttcct tccanaaaat 300
 acagctttac tgtccttaag tgcctaata ttttcnagag gaggagc 347

<210> 9081

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9081

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 gtgagatggg tctcctgaat acagcacaat gatggatttt gactctatcc aatttgccag 120

tctgtgtctt ttaattgtgg catttagccc gtttgcattt aaggttaata ttgttatgtg 180
 ttaatctgat cctgtcatta tgatgctagt tggttatitt gcctgttagt tgatgcagtt 240
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 tttcctttat gtgttttagt ctgccttctg gagctcttgt aaggcaggcc tgggtggtgac 360
 aaaatcgctc agcatttgct tgtctctcag gattttatitt ctnccttgct aatgaaagct 420
 taattttggc tggaatatga aaattctggg ctgaaaatcc tttccttaan aaagttnaat 480
 attgggcccc cctcnaatc ctggnittgt tagggttcca 520

<210> 9082

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9082

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 ccctanagag tggggatgtg ggaaacggag ggtaattaat tctttagtca ctggttcact 180
 gctgaatagc cttggtcagt tttggctctc tcctatittt gggggaaaaa tatttttggt 240
 tctttttttt aaaaaataaa atgttcgcac aatggggaga aaattgcttt aagtgttaca 300
 ccttagccaa cagagcccaa actccgtgtt tccgttcttt ctctttcggg ttctgctgaa 360
 ggctggtgac aacttggcct cttgtcagtg gctgccggca ngggccagga aacaaattna 420
 aactgcanca cagctcantic caaaaanccc tggc 454

<210> 9083

<211> 527

<212> DNA

<213> Homo sapiens

<400> 9083

acataaatta acccatttat tataggccag tgatgtctca aagagtagag gagcgtctac 60
 tggcttttca actccttcag tcttctgatg gcggacttta ccgtgacagc ggaagtggta 120
 ctggaaagaa agattcagtt tccaacataa ttaagcatgt taacatagaa aatggcaaat 180
 aagtaaactct gcctcgtttt tgtgttaaag tcgcttccca aattttccta gaaagaatta 240
 tactgagata gactgctcta ccaatacttt gctgcagtca atccaaagat ctaaccaaca 300
 ttagattact cctcggaat tagtggcttc taaactacat gatggcatcc ttttaagaagc 360
 catgccttca ggatcttgca gaattngaca tacaatctca tgcactgat ttctcaaccc 420
 agagttgctt ttttttttat aagttactcc agtttgtgga caagccangc ttttaactccc 480
 ccctaccctt ccattgaaaa aaaaaattgg gtcctaaaaa ggtngaa 527

<210> 9084

<211> 331

<212> DNA

<213> Homo sapiens

<400> 9084

gacagcagca tctgtttatt gacaattcca ggtcattcct aacacgccgc agcagggctc 60
 tgtacagtcc ggcccgggtg ggaagaagga gggaagcang cacacnaaan accaggtatg 120
 tcgggaagtg cacacaaacc gttgtctttc ctttttggtt aaagaaaaaa aactttgtna 180
 tcaatatccc gtcataant aaaagtggaa aanaagaaac ttgactgctt tcacttggcg 240
 ttttggcatc tcctctccca tttcatatgc acagtttatt tgggtnatgc taccgtcacc 300
 agcanaacac ctgtnagttna aaacnaatgt c 331

<210> 9085

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9085

gagaaaaaaa gcctgtcgcc caggctggag tgcagtggcg tgatctcggc tcactgcgac 60
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 ngcacgtgcc actatgccc gctaactttt gtgttttgag taaagacagg gtttcacat 180
 gttggccagg atggtctcga tctcctgacc ttgtgatgta actagtattt cttatgccct 240
 tattttgtgc taggcacagg gcctcaccca ttattggcac tcggttaagga ttcttgggat 300
 taatganaag ttaacctaaa tcttcaccaa aggccctga ncttcccctc gattcacata 360
 caanggactg gggctctgaa aagtgggctg tgatgcgccc ctggaaaacc cacnaatggg 420
 cctgcanaac tgattgggaa ggttcatgca nggnca 456

<210> 9086

<211> 304

<212> DNA

<213> Homo sapiens

<400> 9086

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 atggtggact cattgaaata agtctcctcc aggggaggtt catctcaggt ctaccctgga 120
 ncaggaaca gtgtctctga agtgggtctg gcttcacagc tgattgcggt tccgcttagg 180
 gatgatcttc cggtaggttc tgcgctctga aatgttgcgc ttcaccttgg ccgtgggtggg 240
 ancctcatcc tgggtgcangg acgggctcga ntgggacttc ttcangctga ncttgggctc 300
 ccga 304

<210> 9087

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9087

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ctctcagcta cacatggagt cagtgtgcc tgcaaagaac agagcangcg ctggcagact 120
gaccttcaca gaccatgcta aaaccctctg aggaagtgcc tggatgaatgc tctggttgat 180
gagattcgag ccattatggt accgancagt gtgcttctta cctataattc cactgtcctt 240
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cttgctgaca canctattca aggttgaaca ggggctatcg gtgctaggan atgcggtgct 360
gcttgtagt gtggagcaag gactgatgcc ttgactcana nctgtgcaca tggtttcatt 420
tttgtcttcn atggttatnt 440

<210> 9088

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9088

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ggaaaaatga acgaatttat aaaataaatt gaggtgtttg gatgaaaaaa aatacaanan 120
ctttgccttc atgtctacag atctctta atattgttgg tcttgcacct tagatatcaa 180
ataaagatat ctagcttgac acaaaaattg gtagctgcaa ggtaagctg tattagtttg 240
atgatgggcc aggaaatgat atattttcta aattttgtcc ttaaattattg gctgtaacaa 300
atgctgatat agcaaaaagt nagcttctat tagacagcaa ganggaaact tgagtgaatg 360
aatgcaactt acctccaagt cctcttaaag gaagtaaaaa aataaatact gtgttttacc 420
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<210> 9089

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9089

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 caccttggtt ccaggcatca cgccagtcac tttatttcca tcatcatcct tgtgaaaaaa 180
 tggaaagtctg ganaggtgaa atgatgaagg caatctggcc acaaatcttc cttctggatc 240
 ctgctcttca gggcatgcat ctcccatgct gaagggttaa atgggggtca tttgccaaca 300
 aatttggtan tccgcttctc cctgaagctg ccatgccctc tanccggtcc cgggttggaa 360
 tattctgggc atancacatc ccttcaatgg ccateccana tgcaatgtcc acctccgttc 420
 ctcggttaat gggctacttt gccaaccgc acngcaattg ggggctgggg caagatctcc 480
 tgggccaatg ctctncccc ctnggtaggc ggggtcccc ccccttctng ggccaacgt 540

<210> 9090

<211> 588

<212> DNA

<213> Homo sapiens

<400> 9090

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 gttacacatc tgaactgatt ggagttacag aatcatatct cctttttgca tttacaata 120
 tatacaatat aaaataaata catttacaca aatggacatt tgctggagca cacagtatgg 180
 tacacatcac aaaaatatac aattgattgc tttacagatg tgaagcccat ctacagctat 240
 agacatgggt ttattattat tattattatt ttactactg gctataatgc aactcctgga 300
 ttattataag cagtttaaatt tttttgtcct tttacgatct ttgcacataa gactgccata 360
 aaatgttttc ctaggcaggt aaacaganac gcttaaataa ttaaaataca atcaccaaca 420
 cccattttct cttctataaa aaaaatanca gttttaaatt tttatatct tttatgttan 480
 catttaaatg caaaatatgg gaataaatac aacaatctgg tttgattgaa acccatntt 540
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<210> 9091

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9091

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ggggagtgga taaagtgcatt ttattttctt ctatgtttgt ttttgtaaaa aggagaaaagg   60
aagcaaaaaga ctccttccctt tcagacccag tgtccactga gcttggaggg ggtgganccg   120
ggaccacccc ctaggaaaag gtgtangaat agaagcaatg gcattggcgc tatantccat   180
ggggangaag tgcctgatgt gcctggcccc taggctggcc ccaccagag cggaggagtg   240
cctcagcttc atcagggtga aactgganaa aaantttctga gcctggatct ctctgccctg   300
ggtcagcacc aaaagaaaac cttccttcag cagctcccag ctcttcaca cagaacccac   360
gcacaggatg gggagtccaa tcttgccctg gaacaagacc ggtcaatct cgggcaacac   420
tgctacnatg tntctgcccc ncatctcccc ancctcctga aaatatanc   469

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<210> 9092

<211> 555

<212> DNA

<213> Homo sapiens

<400> 9092

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aaatatacaa cttgctttta ttaaattgaa aaaaaaatcc ccaagangca gatatcccag   60
tagtttttagt gaaaacaaat ttaatatcat cttgtttgaa caaagctttc agaataagt   120
agcaattaaa ttcttaaagt agggacagaa caccaacagg ctctagactc cggaanagct   180
gtaagccgac aaatgggcat tgttttgctt aacagtttta gcttcaatgt aaatatatat   240
tattacttag aatattagca tctgaactat ataatgacta ttttatcatt ttacttgaat   300
taaaaccaga atttctggaa ctccaaata gtctttaaag tttttcaata taaacataaa   360
ctaacccta ttcctctcta catatcaaat gtgaaataac tgcacaata tatcagcatt   420
ttcacagaaa gatgtttaag gcttctggca cataaaatgt gtaatttccg tgtgacaagt   480
cntaattatn taccgaaaat atttaaaatt attggtaaaa ttaattcnta agaattanaa   540
aaccagaatt ncccg   555

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<210> 9093

<211> 610

<212> DNA

<213> Homo sapiens

<400> 9093

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aatcttttat tttttattgc atacatcaat atttaacaga agaaaaataa agaaccacct 60
atgttaaact gaattacatg ttatcttctg attcttttca atgtagacct aaattttcac 120
atgtatcagt aaacacaatt tatgttctta ttaacatttt tgaatctcac ttttttgcac 180
acaatttgac atatatcaat attattgaat ggctatataa cattctgtga tagcactagc 240
aatacaccaa aatttactta accatttcca atcggtgggc tttttccccc cttaaagtta 300
tctgagtggg actgctanaa aactttgtac aaatagcttt tctttctttt aaatattttc 360
ctgggcatat gccactcaaa gtgagtatgt caaaagatca gttataaagc cctttttata 420
gtctttctaca cagtttcttt aaaaggntac taatacacia tgctgtgctg ataaggacca 480
tgcnattaaa acagtttggc taatacaata catgaactaa ttcaanttgg ctttttaatn 540
ttaggaaatt tgaatacctn ccaatgaatt ttaaaccctt naccctaaac ctttaaantt 600
gccaaaaata 610

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<210> 9094

<211> 437

<212> DNA

<213> Homo sapiens

<400> 9094

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agtagacagg gggtttcacc gtgttagcca ggatgggtgt gatctcctga cctcgtgac 60
cgcccgctc agcctcccaa agtgctggga ttacaggcat ganccactgc gcccggcctg 120
cttcctgcca agttaaacgg catgctaagc tctcagctcc ccatgcccac gtggacttga 180
aaggtctacc ccagccctcc ttccacagcc catcctgagc aggctgccta ctccaggcag 240

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gccccaggct gggctggacc atttaatect cncagccctg gtaaggctga natcacggat 300
 cccacttcat aantggaaaa aactgaaagg ctcagggggg gctgaaatct ctactctaag 360
 gtttctttct ctcaaaattt ggtcgggaag ggggtctnct tntctctggg gcacttttct 420
 tatcccnccc nangggc 437

<210> 9095

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9095

ggaaagcatt ttcaaacttt atttacaact gtcacagtga caaaaagtag tttggaaaaa 60
 aaaaaatgct agtttctccc tgagcctcaa aaaanaacag atagaagtta caggagggtc 120
 atctcacaac aggcatTTTT actgaaatac taggaatttt ttcaatacaa tcagttagaa 180
 atacacacaa attacttgaa aaaaaaaaaa gaggaggcca gataggagct caccncttg 240
 tccaanaaca nctgggtccc ccngcaggc tccaccgctg aggtcctga cattatctgt 300
 cagcccctgg cctgctcana 320

<210> 9096

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9096

gagatggagt ctactctgt acccanctg gagtgcattg gcgcgatctc ggctcactgc 60
 aacaacctcc gcctcccggt tgcaaacgan tctcctgtct ctgcctcccg agtagctggg 120
 actacaggcg cgtgccacca tgcctggcta attatttgta ttttagtaa anatgagggt 180
 tcatcgtgtt agccaggatg atctcagtc cctgacctcg tgatccaccg tctcgccctc 240
 ccaaagtgt gggattacag gcgtgagcca ccgcgccag cctaactatg aggtgattta 300

aggaaagtaa tgggaagggtg cacttaaag cccgtgtgatt ccctcttttc tttatgttaa 360
tctggaaact tgtagaaaag ccttctcttg ataacaaatt ttatgtnact agctcaaaca 420
gtgatttgcc agatttactt aatcnaggaa tataatttng anggaacctt ccanaaaatt 480
ttgggttaat ttggccttcc ttatcctaaa atttaaattc cccctn 526

<210> 9097

<211> 611

<212> DNA

<213> Homo sapiens

<400> 9097

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aagtttcaag aattgtgcaa tgaacacccc atatagcctt cacttagatt catctcatca 120
attaatgttt catcaaataat gttctctctc tctctctctc tctgtctctc tccatgtgtg 180
taccctactg aaaatctttt tgcagaacta tttgggagtt ttagacagct ttgcccccta 240
taggctcaaa ctaatttcag ctcagaacaa gaacattaac ttacataacc aatataatatt 300
aaattcatga aatttaacat tgatgtccca ataataccag ttatttttca gtcacttttt 360
tacagtcatg tttcctacta atctaaaatc caatccaaga tcacacactg catttagttt 420
ccaagtctcc tgagtttgaa atagttcctc agcctctctt tgactttaat gaatattttt 480
gaagantaca gaacacttat gaatggaatg tgttgaattt ggggtggctg aatggttctc 540
ncgatcagat cagtttatgc agttttgggg agaaagcttc nnaaatnata tgtgtgttct 600
cctggctncc c 611

<210> 9098

<211> 606

<212> DNA

<213> Homo sapiens

<400> 9098

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 caagtacact gttcactgaa ataccagcca ctgcagattc aacaatgaac attttggcct 120
 tatttgcttt gtgtattttg gggggaacta tttggaatta aattacacat ttcttgaagg 180
 cattcaccta tataatccag catctatctc ctaagaatga ggacattttc ccatgaactg 240
 cagtaccgtt aaatggctat tanaggaatg gttggtcttt gtgagggtct cacgtccagg 300
 aacctcatca aagtgtgcta ggcccttanc agagagggtg gaacctgctc gccggctccc 360
 tcaccttctc tcccatccca naaaggcaga aacangagggt gctgtgaata gaacagtgcc 420
 ctttgtggtg acaaagctat ggggancctg ctgtgcatgt gccaaagacct gcagggcagc 480
 tccccaccc ccacaggga ctttgaactg catggttttg tccncttcn cttttaaata 540
 tctgaanttc aaataaatct tccccaaat cntctccnat tagaaacctg aatgccatct 600
 aaaacc 606

<210> 9099

<211> 597

<212> DNA

<213> Homo sapiens

<400> 9099

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 acctttttcg ctgttataaa caacttcatt tatagcataa taaacatact ttcagtcaat 120
 ttctttacaa tctaaagacc cctgaactaa attttatgtt gtgtcttaag tatttcaaaa 180
 cccatccatg tcaaactgat aattttacta ttgcttgata ctatgttatt tcccttatgg 240
 gtaaaacttc gatcagtggc caaatctgaa aagcaagaan acactcttgt catctgaaca 300
 gttctattag gatgttggtt gctttttgaa aatattatat actaactctt aaattatatt 360
 taaatgccag ctacccaatg gtgccagaaa nattattgca attgttttta cccaagtata 420
 atttttaaaa taaaatcatg ttgcattgca tttttctaaa atcattagat ttataattga 480
 ataagggtta acttacaatt ttttttaggg ccccaaaaaa aaaaaaaaac ttttttgaat 540
 nccccctatt tntttctccc naaaaggtag ggtatttttt tgtttaacaa ccnctn 597

<210> 9100

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9100

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ctctgtttgc aattatacat gccttcaaag tcatttgaaa gtaagaccat ttcctttggc  120
aggtatcttg tataaagtaa ctttacaaca tatgtttctt gaacagaaac ttacaccac  180
tgtcattatg ttacctatag anacaaaact actaacacaa gtaatatggg cttacaatta  240
taacacaaac ctgtgagagg gcatgataaa attaaatttt gattgccttc ttttattatt  300
atcactacta ctgtctgctc acaaattctg tggccanant ccatttcaa tccttctaag  360
antccacttc atganntaaa catatacata tanaacaaa                               399
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<210> 9101

<211> 477

<212> DNA

<213> Homo sapiens

<400> 9101

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aaacatatga tcattttaat tacagatgat tgaaatacag tgcaacagat gagacagata   60
caatactgta ccagttttta aaaacctgaa ccanaacggn ttcgcattct agtacactta  120
cttacttaaa acaaaaattg cttagataac aaaactatac ttcaagttgt tttanaaaca  180
gttctgcgct aggaacatac aaaggaaaat gaccgtttgt gcttctttaa aatcgaatga  240
nagtctcctc tagggctcctg ctgacaganc cccccagcc tccgccaggt gaggtgcaca  300
gggcccactc caggcaccag ctccccccaa cttggcttct ctggtttgtc gaaagcatca  360
tccantccac actatgttta acagtcctan tcaccacggg gantaaattt ttctgaaggt  420
ctcatccgtg gaatccnacc gtacataata antttacccc caatcccnat tgaatcc     477
```


<210> 9102

<211> 366

<212> DNA

<213> Homo sapiens

<400> 9102

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ctcttcgtaa aggattcaaa gcaggcacag tgggtgtacac ttaaagtcct agctactang 60
gaagctgagg cangaggatt gcttgagccc aggagttcaa ggccagcctg agcaacatag 120
tgagactcca tctctaaaaa aaaataaaaa taaaaataaa taaaaaatac aactaatgga 180
aagggaaga aaaaaaaaaa aaaaaaatta aaagtgttc ggagcagtat tcctgcaaga 240
agctcccggc gcatgtatat ttacagaaaa tatgtacatg cagcaggccc anaggccacc 300
anaaggcaga gggcttctgt aacaattcaa gcctctgggc ttgaaccag ggaatgggtg 360
gcttcn 366
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<210> 9103

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9103

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gtgggtaaca tcttgattta atttacaat aaaaagccaa aaccctcaat gcaaaggaaa 60
actgcagttt acacttattc tgganacat ttttaaccac agaaaatgtg cccctgtagc 120
atgtttttta atggcaagtg ctatgattgc ccanacatcc ataaactgct tgtatggagt 180
aagaaattca taaatgaana aanatttgtt ttctgtcttg tttctcctag gtcacgaaca 240
ggatatttcc cacaaaatgt ttgacctga aaggaagtat gattccagta cttctgggtc 300
taactcttct gaaattacac tgcaagctga aacttcnggt tacttcagcc acattttctt 360
ttatcaccca tttccatgt ttttttggct taaaaccnc ctgctgtccc ccnttcccc 420
ccgttcncng tgttcganta 440
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<210> 9104

<211> 482

<212> DNA

<213> Homo sapiens

<400> 9104

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gggcaaatag ctaattttat ttttttcaca tattaaaacc cactaaaaat aaccattttt 60
ctaactaacc acaataaaaa ttagtganaa aagtactgct gctttacatt tctccaaatc 120
tcttcaatgt ctgatgacag acnaaagctg gaatcttgta tctgcttttg cattcagcct 180
attacaatat cacaccanat agcctcttga aaactcctct gcatactcat gaaaaaatga 240
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gaggctgana tgggcagatc acttgagctc aggagttcca gaccagcctg gccaacatgg 360
tgaaaccccg tctccactaa aaatacaaaa attaccangt gtggtggtgg gtgcctataa 420
tcccanctac tcngggaanc tgaagtagaa aaatgcttga acccagttgg gggaagntgc 480
at 482

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<210> 9105

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9105

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aataaagaca aagtcttgct atgttgccca agcttgtctc aaactcctgg tctcaagcaa 60
tccttctgcc ctggccctcc caaagttctg ggtattacag gtgtgagcca gcactcctgg 120
cccatcacag tcttaaaacc aaaagttctg tgtccgagga aaaccangag tgattggtca 180
ctctatttat gactcatagc acttacaggc tacttcggca gggacttggg gtacccctgt 240
tcttgatgg cacatcatta tcagcaacag gaacagttct ctganccctg gcccctggag 300
aatctctagc ttagctatct tagacttggg gtcaaaaaaa aaaaacctct tgcccaactc 360
agcaacacca gacaggggcc tcatatcttg gctcgtggaa agtactttta taccaanccc 420

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tctcctaagg gcataagaac caacattccc attctgggga aanaaaaagc agtnccccctt 480
ggacccaagt actgggtcct gccgggaatc ctcccccccc aggggcnnngn 530

<210> 9106

<211> 511

<212> DNA

<213> Homo sapiens

<400> 9106

gagacggagt ctcgccatgt cacctaagct gaagtgctgt ggcacaatct anggtcactg 60
caaccttcac ctcttaggtt caagcgattc ttctgccttc ccctcccaag taggtgggac 120
tacagccact acgcctggct aatttttttt gttttttag ttttagtaaa nacagggttt 180
caccatgttg gccaggctgg tctcgaattc ttgagctcaa ctgatctgcc tgcctcagcc 240
ttccaaagtg ctgggattat aggcataaag ccactgcgcc tggctaanat aatttctttt 300
tatattagtt gagggtcata aaacaaagtg aatgcttatt aaagangtag aaaaaataaa 360
gtcattaatg cacacagagg ctgaagattg tgattttata naaatgtaag tcataatang 420
aatgattatt actaacttcc tangtatacc aacataccag tgcttacaga tttcttacta 480
antcntgcct gttgtttttac cnccggtacc c 511

<210> 9107

<211> 535

<212> DNA

<213> Homo sapiens

<400> 9107

gagttggagt ttcgctcttg ttgcccaggc tggantgcaa tggcgcaatc ttggcttact 60
gcaacctcca cctcccagg tcaagtgatt ctctgcctc agcctccgga gtagctggga 120
ttacagacat gcaccaccac gccagctaa ttactgtatt ttttagtaaa nacagggttt 180
caccatgttg gccaggcggg ttttgaactc ccgatctcag gtgatccgcc caccttggcc 240

tcccaaagtg ctgggattac aggcatgagc caccgcaccc ggcctatfff ttcttaatta 300
 catatgtaaa catatgtgtt ttctaaatac atatagtatg tatgtatgct gtatctgtat 360
 ttctatctac acgtatactc aatttggtat tcggaaactc tatctacatt ttgatcagtt 420
 ctatgttatt aaataattgg ctgctgtccc taaacaaaaa tataaggtaa aaaaccgaaa 480
 aaaaaatntt taactnccgn aaaaaacaac ttttttaatt ttgacnctn ccaat 535

<210> 9108

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9108

atttatccag tctttattat tgaaacactg catttccaaa ccacaacctt atttatccag 60
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 tgaaacactg catttccaaa ccacagtggg ttctactaac aaagtgtcta cacttcattt 180
 ctccattaat tacaacatt tcagggtaat tacacttaac actttatfff gtatcagctg 240
 accctacca caatgcaggg aggtaggcca tcatgccctc tatttgtttt cccctaaag 300
 gagaaagctg anaaacaagt tttttgcaat tatacaaata ttgggtgaaa ttcagaccaa 360
 atctgagagg actactgatg agttcttttc actatagaca ttcatctat ccaagaaatg 420
 gggaaaaaag gagaatggaa gatttcttcc ctgctttaat tggacaattg aaatacnaga 480
 atgntgacct aaaataccn caaaattgtt tgaaaaattt aaaatttctt tttttncccc 540
 cgn 543

<210> 9109

<211> 434

<212> DNA

<213> Homo sapiens

<400> 9109

gagaactggt aattgattac tttatttcat ataaaagtta cattgaaana anangttgaa 60
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taattgtttt attgataaca ggatatacat attaaaagcc tcacactgaa gcccacacgc 180
atgtccaacc cagacaacaa tgtgcaaagt aatatgcana acaatctcgg aaactggcgt 240
ctccagnatc acccacactt tgtccctctg gctgtgacgc agctcttccc ccaacggcgc 300
acacgcttct gcggtgacca agtccacttc caaaccacct gcaggtttgc tcgcttggt 360
aggacggtgg ctangtang tccctttgtg gttttgcac ancagtggta aaacctgat 420
tcngatgggg tnca 434

<210> 9110

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9110

acattattgc acagagattt ctcatcaatg ttcttcagtt tttatgtctt ttcctaaatg 60
tgaataagt ctatggataa aatacaaatg tagaaaataa cagcagcatg atttgtcaaa 120
gttaatccct ataatttagt aagaaaaaat ggatataaac aaaataagt ctctttctaa 180
actgtactaa attttcaaaa atattgtttt aatgcagtga aggtcctgaa aagcctattg 240
aaagcgatgc tgagtcctgt tttcaaaagt gtcctgtttg ggttttcttg gtgaananca 300
gaatttcaag tgaagtaatc gacggactaa tttaaaacaa aacagccctc ggcttcccta 360
ttggcctgtg agggcaccgg ctccgggacc ctgacctggg aggcancgaa tgggtgggggt 420
gcctggcccc catctacag tacacaggct ggcagccttc catctgatcc accanacag 480
aactttctaa tcttaactcc cnaccgtna aactctgccc ctnaaagntt ttggctccaa 540
agggggt 546

<210> 9111

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9111

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ctgagagcag aggcctttatt tacaatgaca ttcaaacagg atttagcaaa ggatgcctct 60
tcctgctcgc atcttancag catgggttgt acttcataaa cagaaaagag aaatatacctg 120
ggagcaggaa gtgaactctt ttctcagata atgttctcta aatcccaaca cgttccatgc 180
tcccggctct tancaggtag ttggtggaca ctiggttata gcagctgggt gccanatgcc 240
tgcattctac tgaggaaatgt gttcaggga aatgtcnaca ctggccggga aaagcatcag 300
gctttcacct cactcatggc ctccataagg cgaacgctgt ttgttgactg ctgtcgtcca 360
ggaaaatnaa cctgtttcct ttctctctgc ccaggaaacc ggnaggntga natctcnaaa 420
attcacccc cccca 435
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<210> 9112

<211> 552

<212> DNA

<213> Homo sapiens

<400> 9112

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gaaccttttt ttttcaggta taaacattca ttcaatccaa taaagacatt ttagaaaaaa 60
gtcaacctat acaattttatt ttatttttcc tataccttgg ctaaacaaaa tatatttggt 120
gatactgtaa aatactaagc attttcagta aaactggcaa tcaaatacag cttaaccttc 180
ttctgcgtga caactgagga ttttaattgg aaaagtatta tagtctataa acaggaatac 240
ccaaaacata tttaaaccac tcgagcactt tgatttttcc atgttctttg catctagatt 300
gaaacacatc acaggaaatt tcaaagacca acggctgaat atttttcatt tcaacatttc 360
cagtggcatc ctacaagaga actagcactc acaatgaagt catctgaatt ttctttaaat 420
cgtaactcat ttttaatttc taaacaggtt tggcctattg atttaaataa nanaattatt 480
atttcataa aatgaattta ggtccnttga aatttccgtt tgaaatctta tccaatacct 540
tanttcccgn ca 552
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<210> 9113

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9113

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gctgttagtg tttatttgaa gtgactttga aggactgata atattatggg gcaggcagac   60
tctcactatc ttaagggtgt tcgcctgagc cttcttaaag tggtagccca ggccgggcgc   120
ggtggctcac gcctgtaatc ccancacttt gggaagccaa ggcaggtgga tcacctgagg   180
tcaggaattc nanaccagcc tggccaacct ggtgaaaccc tgtctctact aaaaatacaa   240
caacaattan ccgggcgtgg tggtaggcgt ctgcaattcc agctactcgg gangctaaan   300
canganaatc acttgaaccc                                     320
    
```

<210> 9114

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9114

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gtcagacaaa aatttaactt tttatganat ttcagttttt gaaatacaca actcttacag   60
cacaaacaca gtattttacat ttcaagttct ttgtacaaaa natgtatgcc attttggaan   120
aatattgttg anacatgat ctaaaatacc tgtcanantt actcatggaa tctgctcttc   180
acaaatccat tgtattatga cataaaatat ggctagacgc caaggtttaa ccatacataa   240
aaatactaata tctcggctgg gtgcactggc ttatgcctgt aatctcagca ctttgggang   300
caaangcagg tggatcacct gaggtcagga gttcaanana agcctgacca atatggtgga   360
aacccccgtc tctactaaaa atacnaaaat ta                                     392
    
```

<210> 9115

<211> 302

<212> DNA

<213> Homo sapiens

<400> 9115

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ctacaaataa agtgttttat ttacaggagt tgtctctcca ggtcccagct ccctgccacc 60
cccaccccag ccccaggag aagaaggcgg atgccagagg agctggcaga ggctgggcag 120
gtcctgagtg ggccaggcta ggccaagaga gaaggcacga ggccctgggc gcccantcc 180
cagggcagaa gccaggcctg cctggagaag gcagcacggg gtcagctctc aggggtcagg 240
ctgggttcca cgccgccgca gctctgctca taanacagtg ggcctctgc gggaanaaan 300
ca 302
```

<210> 9116

<211> 491

<212> DNA

<213> Homo sapiens

<400> 9116

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aggaaaaatg aaactttatt actacaaaca tgagagctgc atacattcta aatcaaattg 60
ttgcaactta taataccaag aattaaatgt gaatcctact taagaatatg ctgagctggc 120
cangtgtggt ggctcacgcc tgtaatccta gcactttcag gctgaggcag atggatcgcc 180
tgaggtcagg agtttgagac cagtgtggcc aacgtggtga aacccatct ctactaaaaa 240
tacaaaaatt agctgggtat ggtggtacac gcctgtaatc ccagctactt gggaggctga 300
agcagganca ttgcttgaac ccgggangcg gangttgcan tgagcccaa tcgcgccacc 360
gcactacagc ctgggtgaca agggcgaaac tctgtctcat ctaaaaaaaa aatatgctga 420
tcnngtcntt ttgaattaaa ctctccctgt gatatactgt tctctatncc atttcaaaaa 480
tnangctggg c 491
```

<210> 9117

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9117

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cagggtcttc tgtagctttt gtatctcatt ttgaagttgg gtactttcac cttggcatct 60
ctccttttagt actcgggcct gttcctgaag tttagtagtg agggctcttct cttgctcttc 120
cagcaactgg gccctctccc tctccatctt ctcagtcaat tgtttcacat gttcttgata 180
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tgctgaagcc tgtgcanatt cagcttttac acattccact tcaatctctt tttccttttc 300
tgtgagaatc tggctctgtct gtaaaattgc atcggtcaca gactccttgg atttcaagta 360
tgtctgcaga atctcttcag cctgtatccc cticcttggg tcctcataat actttttctc 420
cagtcttgta cticctgaat aaaaaaaaaa aaaccccccg gtttccaaaa aattccccgnc 480
ctccattcct cctcctnaag aatgaaaatt gaactgaaat taanctnaac aacaattgaa 540
aaanct 546
```

<210> 9118

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9118

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cctgcaaagt acctttaatg tgtttaaatc agcagcaagc attangacat gctattttgg 60
ccccataagt taggtgtgta gcactacaca ttagacacca agtcatccca accaatattt 120
atccatatga acagataaac tgaacaaaaa catagttctg ataaaacctg cattcacaac 180
ctaagttagt ttaaagtaaa ttttttcaca attgagggtc gctattttagg actgttttgt 240
taataataaa aacaggaatt atatanaaga taaaacacca ttttttactg ctatataatg 300
tcttgctata taaaacatac cctcaacaag tcaaaatatt taaaaccagt gtttcaaata 360
ccaaaaatca cagctatgtt actgttcagt aactccactc aaataaatgt tagtactgca 420
ttcttgaaag gaaaaaaact gcanccaagg caagaactct naattttgcn cccaattttt 480
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aaaaaaanaa anccccctcc tgcaactg

508

<210> 9119

<211> 445

<212> DNA

<213> Homo sapiens

<400> 9119

gagacggagt ctcgctctgt cgcccaggct ggagtgcagt ggcgtgatct cggctcactg	60
caagctctgc ctcccgggct catgccattc tcctgcctca gcctcccaag tagctgggac	120
tataggttcc cgccaccacg cccggctaata ttttttgtat tgtagtana gacgggggtt	180
caccatgttg gtcaggatgg tctcgatctc ctgactttgt gatctgcca cctcagcctc	240
ccaaagtgtt gggattacag gcgtgagcca ccgcgccag ctgcacactg tatcattttc	300
atttctctcc cttgctgtcc cctctgcctc tgctcttgcc tcccatcata tggacacact	360
gtgcctgaca cacacgtca cataatctct ccttttttgt ttccctagct actcatcaac	420
ctcangtttt gcgggannaa aactt	445

<210> 9120

<211> 263

<212> DNA

<213> Homo sapiens

<400> 9120

gtacgaaact gagattttta ctgacatgca gatgtgcttt agagttaatg tttctacaaa	60
aagtttctat aaacaataga aaatttctag catgaagtca caggatgtta aaaatattac	120
aatgcaataa atacaactac atcctccaca gcccacacca gacaggaata ggcagctatc	180
aggtttggag ggaaacactc ttgagatcgc cttcacgac cagagaaacc cagancacca	240
cncaggaaga nggaacnacc cna	263

<210> 9121

<211> 341

<212> DNA

<213> Homo sapiens

<400> 9121

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gggagtactt tcacgtttta tacgcaaggg cataaaatag aatgttagga aacaatttgg 60
atttttttcc ctaaaatata ggtgactatg ggctagttta caactttcct tctctcactg 120
aaataaaaaat acatagttaa ggaatagga cgaatacata acaggtgaca ttgacagtt 180
tgggcatatt ccttgttact ttctaattctt ganaatcaca gtttgctggt ttagaggtat 240
ctganangtt ccanataaaa ggcgatggct aaatgctctt aaactttgaa ccgtgctgga 300
tgctcttaag ttaggaaaan gaaatttata accnaaacct t 341

```

<210> 9122

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9122

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ggtaataaga ttaattttc cagtagcctg catgaattgt tcccacataa aactgtacag 60
ttagtgactg aattgtatac ttaagtcca gtattttaca ttagtgagac tgaaattaga 120
ggtaaatttc ttaacaagt gtaaggctta cctatttata aagaattatt ctgtagtgt 180
ttaagaaaaa cagatctaga gacaatccag taggctgcat tgtaaacatt atgattataa 240
atctcttagt actgccatta ttattgacag ttttgtaaan acttgtaaaa agtccagttt 300
ctcaggaata tgaaaattat cttcagaaac ctgggtgggg cctttctcca attcctccag 360
ccagctgaaa tactgccaag ctacttcat gttgcaaggt gatctgcact ttcttgtag 420
tcgcttctgc atatactcgg acaanatctt ctgttncaga agggcggaca aaactcnaa 480
aaanctgttc ttctccccag ttc 503

```

<210> 9123

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9123

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ggcatgagag atgcaacagg ctttattgtt gcagcaacac taacatatac gccccattcc 60
ctgctgancg ctgtccccac ctcacccctt ggttgtcgat ggtgtggaac attgggggtga 120
ggggtaaaat gcctaagcan aactggaggg angcaaatgg gactgggtgag ggtcgggatac 180
acctgaacca ggggtccaac agtcaggata cccgactcca tccacacagg ggcatggaac 240
acttgggttc tganttcaaa atttggcaat gtcttgacct gggttggaac gtaggtgggg 300
tctggaaaan ctttgggtcca ggggtcaaaa ttgaaaatg ccttgctcca agccccagtt 360
tggggatgaa catggaaaaa ggtggatggg antgtctctg ggttcacaat ttgaaattgg 420
ccatggatgc tctggcctga accccatttt ggggctggat gtaggtgctc ttggtcnaa 480
gttccaagct ggggaaaanc ctttcccaag ttattggggc tggntttaaa ganatcctaa 540
ttttgggcct gnc 553

```

<210> 9124

<211> 544

<212> DNA

<213> Homo sapiens

<400> 9124

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cgttntttt ttttttaaac aattgattta aatccatgtc attttacttt atatgtactg 60
gtctctcatc tgactttang cgttttctgc gggngtgtat aaagtctcat cagaatcctc 120
agttacctcc accatcatcc tcttcctgct caaactctgg caaagggtcg aanggtcccg 180
tctgaataaa tctctgtgan tttatcttcn aaagtacaat gcaactgctt tccctgcctg 240
agctacttct gaatcagcct tcaaattaat ctcttggtgtg tctgcataaa cttgaacaac 300
tttcatcatt tcattaaacc tttcacagtt cttgaanatc aaacggacat cggccacaaa 360

```

ntcatccggg atttggtaat gttgggaatg ttttttctga ancttctttt tcnccggggga 420
naaatccatt gggttcttta taattttata ataatttggt atcnaacaag aaaaggcccc 480
ggaaatccat acttanticct ggcaataaaa ggtaaaccaa aaaaattcnn ctttcccttn 540
ggcc 544

<210> 9125

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9125

actgagaggt aactttttat caatcaaacc acatacccca atttaacacc tttcagtgt 60
ctgaattcaa ctgacagact aaagggtgtt tcctgtaaca gtctgaaata ttaagtgtt 120
ttttgtttt gtttttaaat cttatttcan aaaacttcct cttggggtag gaaagtacac 180
atgaagcanc aaagtaacga aaaaaaactt aaatagggcc ttcaganatc ccacacacta 240
caaagattct gccaaagccat aanataagt tgaagcccag tatatgtcca gcttttctcc 300
tcaggacatc ttcagtgttt cttctctttt aaacaccaca tcaggttcta gccacanact 360
tgtgttttgg gtgtgcctgc tttgangggt ccatgcccان tgtgtctgct ggtgaccaag 420
accancagta atgantaacg ggcgccttc 449

<210> 9126

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9126

ctttctttct ttttttgtgg gtacaacaac ctgtagccac atgagccgta tctacccagg 60
anattccttg ccagattgga acatggagat gaacaaagct gcttctggga agcccatttg 120
gaaaaaaaaag anggaactan aaagctgcca agtcaagctt ttgaagcgga nacaaagtca 180

aaagtttaga cctccctccc aatgctgggg atgggctgac tgtttaacca tgtgcacacc 240
 aacccagtgc acaccaggta cagtgtgaca ggggtggctat ggcctaaaac atgggttttg 300
 caggcaggct gacgtgcatt caaattctga ctcttctga ccacacaaca tggggctggt 360
 gatcttgact cttnaacct gtttctttgc anaaaaaaan ggggcaataa taataccccc 420
 tcttaagggtg gantganaat tactttgca 449

<210> 9127

<211> 501

<212> DNA

<213> Homo sapiens

<400> 9127

acacttttac agtttaagaa atattaaatg tgataactgt tcaggatcta ctttttacac 60
 aatctcagta acgtatgtac atagtcccaa aaaaaaaaaa gcagcatttg cctgggaaca 120
 catcactata agcaaacaaa acatcaaattg gctgaattc taaaatacct ttggattata 180
 taaaattaca ttgtaaagtt acaaatgttg ctcatcttg anaaatgttt gaatgtttaa 240
 ataatgttgc cataatacat attatttcac gacattaaaa aaacaatgg tgaatacaag 300
 gtatcatcat ttttaagggtta aagagataaa gcaagtacat atacaaatcc actggaaaag 360
 ctaagtttgg agctgatttc ctctcttgaa ttgtaaaatt tcagtaatac acagtcacta 420
 tctactgctg gaataatgcc tgagcaattt aggttganga tacnaacnat aacaaaaacc 480
 tgcccnata ttcaacttgg g 501

<210> 9128

<211> 460

<212> DNA

<213> Homo sapiens

<400> 9128

aggtttctaa aatgaatgtt atttgatttc atcatatatt aacagatttt agtaagttgt 60

ttttaaacta gaggaattga ggcagagaga aatgaagtcc ttttactgga aattttcatc 120
 tcttaatgtg ttaattgatt gattttttaca catttcattt taaacatgga aatgatgaag 180
 gttctaattg taatgagtag ttgtttttgg attgttcagg tacactgcct cttttcttca 240
 gacactgggg ctctttttgtg gtcactgagt attactgttt tttcaagtct tcaagcacat 300
 ctgtctttgt gatttttgcc catgcattgg ggattttacc tttacctgca aattttttct 360
 gatattttnc ttcnanattt gatctgaagt gaganacaaa ccatttccag tatancctgga 420
 tggaagtatc tgggggtgatg ctccacatgg cataatcccc 460

<210> 9129

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9129

cttgtgaaat cattgctttt aatcttttaa tctatccatc tttaaaaaga ccctaaagga 60
 ggggtctttt tgtccaggaa gaacaataaa aggctgtgga aatacatcca gaatatacaa 120
 ctaaatacaa aaccaaagc agcactgaat gggcaagaga aagatatttg cggaggataa 180
 aatggggaaa acacatcaaa atactaaggt taaaatttct ctaattaggc agatataaaa 240
 tgacactgat gaggggtatat gatagccata ctcccaacaa ccaaagttat aaagcaatac 300
 gtgctcccca aataacaagg aaaagaattc tttctattcc tttgttccc cgccccatcc 360
 cttgaatatt aagcatgaac actgtacatg cataaatcnc ttttacaagg gccacncgat 420
 nanatcacac aaagtctcat ttccccaaaa ataaattctg ggtcgtgggc nccttacca 479

<210> 9130

<211> 601

<212> DNA

<213> Homo sapiens

<400> 9130

aaaaggcaaa caactttaat ggttattttg ctaaagataa aactctgggt ggtaaaggaa 60
 ttaaaggcag antctcaaag agatatttgc acccccggtg ctgtattagc actactccca 120
 atagtcaaga ggaagcaagc caagtgttca ctgatggagg aacagagtgt ggtacgcaca 180
 tgtaacggaa cattccatta tatgtataat acaggaagga aatcctgtca cctgacacaa 240
 catggatgaa ccttgaggac attatgctaa gtgaaataag ccagtcacaa aaagacaagt 300
 cactgtatga ttccacttat atgagatact gagaatagtc caaaccagag agacagaaaag 360
 canaatgggtg gctgcggggg ctgggaagaa tgggaattac tgtttaatgg gtacagtttc 420
 cattttacaa gctgaaaacc tatggaaatg gacggcgggtg acngccnccc acattatgaa 480
 tgttttaaca ttaactttct gaactgtccc ttaaaattgt gaaaacatat ttttttinnat 540
 ttttttcaac aatttinaatt tttagaaaaa aacccaaccc cccnggggtt ttggcccttc 600
 c 601

<210> 9131

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9131

aatgctgcat ttcttggttt tatttgaaac agtgcataatt ttttagcattt tatggtagga 60
 ttttacactt gtcattttaca caaattacaa ggttctgctt caagttttta aaaaaaattt 120
 aaaaattcag cccatgtgca gcacaaaaat atgcaaaact actttacatt atacacactt 180
 tttatcaaag gaaatacaaa attctggctt gttgttttaa acaaatacaa naagcttcaa 240
 actaaacaca aagggttaac attaattctc aaatataagt ctgcactttt gtgtttagt 300
 tctctgaaat gtgaatacca aattcctaag ggattttaat gttttccttt gaaaaggaaa 360
 actaaaaaaa ttcccgtaaa caantccctc cccatcagct tggcttttcc caaccctact 420
 cttaggtccc ttaatgccan anacttgcac catgtttacaa aattgggggt gggcccttaa 480
 tentacaagg aacaaatccc tttaactten cn 512

<210> 9132

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9132

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gttttgcaac caccatcaa taaactttct tttttattat taattggggg cagggtttct   60
gttcttgcaa ctgagtccta acagaaaaca atggtttcgc tgaccacacg gagagctgag  120
gacaggacaa aaaggcatga gacagctgga cacctggaga gaggtgacac aggacagagt  180
cctcaccggg ctgccctggg cctcggggag ctcaggctgc agtccctggg cctggtggca  240
cccacagcac ggcagtctct ggctgggctt cggggagccc acatgtctga tcggcaaggc  300
ttggctggcc aggcggtggg caccaacgtg gtgggtgggc agtcctgggc ttccaggagg  360
cctcctggga ctcaagctct tcagtggggt gtgcctgtca nggtgcangt gggttctgtg  420
gctacactcc catcctgtct tccctctgtg tncc                               454

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<210> 9133

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9133

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ggacaattgt gaacgttggt gtccattct tttttctcc aatttcttct gcttttcacg   60
ttccattttt tcaagacctt cgcgaaatcca agcgggaaga ntcctgcgtt ttactgcgtc  120
aatttgtgga ngctcctgct tcacaggaag tgcaataggt gaacgctgac gatccctgaa  180
tgatgatggc ctttctcttc gattctgggg angtgctgga ngtcctggan gtcctggttg  240
ccaataagga ggatgaaatc caccttgagg tggacaaaaa gcagcccat gctgatagtc  300
aaactgggtc actggcccca ctgcaaaatt atcgggtggt ccaccaaagt tgtgattggt  360
ctggttaaat atatgcctgt tgcaggggc aaattcccca ctgtcctgac tgttgctgtc  420
ttcanaaagt ggaacaatgt ccattgggcc tgggtgtngt ggcatccatg gcttaatctt  480
gaaggggggt ttttnggnt cn                                           502

```

<210> 9134

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9134

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aagtttattg tatatttatt gtaaattgtg tgcattattg attagtctgc ccaggactgc   60
cataacaaaa tacttcagat tgggtgggtt aaacaacaga aacttgtctt ttcacagttc  120
tgttttctgg aagtcccaga tcaaggtgct ggtccgtgtg atttctgggg agggctctcc  180
ttggcttgcc gatggcctcc ttctctgggt cangcacggg gggagagcaa gcganccct   240
tgcgtctcct ctcanaaaga cnaatcctgt tggatgaggg cccaccctc aggaccgatg  300
taaccttaat gacttctgta gaggcccat ctccaaatac agacatgctg cagttaggtc  360
ttcagcattt gttctttaat anaattttca atgccagctt gcaccattaa gtcattgaca  420
ttcttctgta aatcctcaat gnaattccc atttcttccc attacantgt ttaagggcnc  480
ctgcttnaaa ctggaatcca aaaccncc                                     508

```

<210> 9135

<211> 498

<212> DNA

<213> Homo sapiens

<400> 9135

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attagtaaga gagtttattt ggggattaat acataactaat ttattttatg tgtagcaaac   60
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gttttcctca catgatctct ctgtgacaca tttctcccct ctgacaggcc taccatgacc  180
ccatgttaaa gttgtccatc atgtcagaag angaactcac acatatattt ggtgatctgg  240
actcttacat acctctgcat gaaggtaga tgtgccactt aattgtcatt aaatctaaag  300
ancagcgggt catgtaattt tcagtctaaa cttctaattgt agtgctgacc tatttttta  360

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ataaacctgt taatgggtgt tatgcttttt taccattca gatttgttga caagaatagg 420
 aaaancnacc canctgatg gaacagtgga acaaattggc ccattctcct ganctgggtt 480
 tntttgaatt tttgaccc 498

<210> 9136

<211> 467

<212> DNA

<213> Homo sapiens

<400> 9136

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 tcaagtttag accaatgggt atgtgtaaaa atttcttttag cttcaccatc atccttctct 180
 tcttcatect gttctccatc agcctccttg cgttcaccct gaagcttctc gaccagctgc 240
 tgcttgatc ctgggganan gggttccac tctganeggg tgggaangca atgccaacaa 300
 tccgggaaaa ataaaaccac tgtctccaca tgagctggaa ctgtacgccc cttgtgggtc 360
 tcctcacggc gatggtacga atctctgcaa aacggtacca ttgtttgcac cacttaaatn 420
 aatgcctgtt caaaacctic aacancaaat anctctttt tcnccc 467

<210> 9137

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9137

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 gattatttga atttatccat tctgaaaatt aataanatct aaaactggca tgacaatcaa 180
 natttgtatt tagtgaaatt taaaataaat gtnagccata gttaaaactg ttgctgcatt 240

catgaatgcc cttaggaaaa ggtccacagt aaaatcagaa agctgaacct ctcctgctgt 300
 ttataggata tgtttatgct gaattaattg ccagggtttc ttaaactttt aggggaattat 360
 actttggtgg ctcnatagta aattctacaa attattttta aattgatttc ctttccttan 420
 anctgcanga aaatatctgg caaggtgcat ttaatatattg gaaaaaaaaan atgaacngtt 480
 acctacttta ggaaaaaaaaat aac 503

<210> 9138

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9138

acaaagcagt tggggcattt attgacattt aaacaagggg aggagatcct gaacactagt 60
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 cggncaggan caagaattcn agttaaacga attgaaccag tccaaccaca anacnataaa 180
 gggaaacagg gcgtggggat ttccagtttt tcctttttaca ttacaaagtt tccaacacaa 240
 gaagccaaca ataccccagt gctgcaccaa gttacttccc actgtttccc nagnnacagt 300
 caattaataa tcagtagtcc aagttctaan aacatttccct ggaaaacaag gacgcacctc 360
 ccgtggctct atgcatggcc tgccactgat gaatcaaatt cttagaacc tacgaacgtc 420
 tgataccttg aaganaacnc ccccttaaaa tctcnnncat ccnggccc 468

<210> 9139

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9139

acaaaaaaaa attttttatt aagtgtgaaa gcaaaacagg tacatctatt taaatatttt 60
 ttacatattt atagatacaa caaagacaaa taacttagca aaaattacaa gtttaaagaa 120

tagtactatt ttgaaacagc caatatagta tctgaaaata ttccatttta tccataatca 180
 gtgagtatta tttccaaaaa aagtaacttg cattttcttg tgaaaaatat gggttttttt 240
 ttanatgtct gccaaaggatt tatcanaaaa gtccatcttt ctaaacctaa aaaattgtaa 300
 tgcctttatt gaaaactttt tttacctaat ggcttttaaaa accacgtgtt ttcctttgga 360
 cttaggtgaa ttctaaatct ttacttcact ttcaaactac agggnatcga cattaacnaa 420
 aacnaatcnn attga 435

<210> 9140

<211> 427

<212> DNA

<213> Homo sapiens

<400> 9140

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 tgcccangca acagttgtgc agtgatacaa tcttggtca ctgaaacctc tacctcttgg 120
 gctcaggcaa tcttcccacg gctcactgaa acctctacct cttgggtca ggcaatcttc 180
 ccacggctca ctgaaacctc tacctcttgg gctcaggcaa tcttcccacc tcagtttctt 240
 aagcagctgg gactacaggc gtgcaccacc acacctggct agtttttata tttttggtta 300
 aaataaagtt tcgccacatt acccaggctg atctcaaact cccaagctca aaggatccac 360
 ccncctgaaa tctcccaaaa tgctgggaat aacaggtttt aaccaactnt tcctggccaa 420
 ggttnnn 427

<210> 9141

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9141

ccacaaaaat gtaatatata tttaatagca cattataaag ttcctgacca aagacgttga 60

tttctaatt ataatagcac agaaatcctt tagaatttag taaacgtaat taagactatt 120
 cagaagtaat gaaaaaccaa tatgataaaa acaaaaatcc tccagtaaag aaggaacctg 180
 tccatttgag anaaatacaa ttgagaactt gcaaatgana caagggaaga tggcaatttg 240
 gaactgcaat agaaataact atagcagaaa caaccattta agaagtttta gcagcaataa 300
 gtatttatta ttctgaatga aatgtncagt tgacttttat ataaaaatcn tcnaagtgc 360
 atattggatt atttactatt aantttaccc cccaacngc 399

<210> 9142

<211> 490

<212> DNA

<213> Homo sapiens

<400> 9142

ctggagaatt gtacatgttt tattgggaat atatTTTTtC tttctgaatc tgttatgaat 60
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 aaattagctg ggcatggtgg cgcacacctg tagtaccagc tactctggaa gctgangcgg 180
 ganaattgct tcnacccaaa aagcggangt tgcagtgagc tganatcgcg ccactgcact 240
 ccagcctgtg tgacagaatg agactttgtc tcaaaaaaca aacaaaacat gcacacattt 300
 aatcaatata aaatattatt tctgcgaagt cacttcaagc tgatactgca tactccatat 360
 atgctaaact tcacaangtc tttacctcat acctgantct ctttcctgaa cccccgcggg 420
 ggtaattcaa tnccttgggg gtnccttacc cccttggtac tacaaccttt gggcnccagt 480
 ncgtttccac 490

<210> 9143

<211> 542

<212> DNA

<213> Homo sapiens

<400> 9143

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 atctagaaaa atacatttta aaaatcttca acagaacatg ctccctgtaa caaaaccttc 120
 caaacctgt gttttattat acaaagcaat ctacattagt angtaaaaag aaatttctcaa 180
 atttagcaat gtcattttcc atccaacatc catctaattt acagatgggt ttccactatt 240
 catactggaa ttagaattct gtaataaatt ttttctaag ttttctgtac atattaaata 300
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 cagttaactt tcccaaataa cggactattt ctgggaggaa acctaattt cacagaaaaa 480
 gattaccant aacaatgaat tanaaaatnt nggggtgaaa gttctcctga aaaacatcca 540
 cn 542

<210> 9144

<211> 297

<212> DNA

<213> Homo sapiens

<400> 9144

ggctcttact tgtttctgtc tccttttcac agggaacact tccacagggt ggggaacctc 60
 ccccatgggt aacatgggtc gggctgcctc aaatctggag gctagactta gcactacatc 120
 aganctgtgc cacttcacac tgacaggcag tgtttaanaa aaacatctca acctgccagc 180
 caacgaaaat ggggtgacaag tcanaatgtg gggcagggat gtnttaaagt gaacagaant 240
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<210> 9145

<211> 284

<212> DNA

<213> Homo sapiens

<400> 9145

aaatactaga aaggccataa tgaacttaaa ggactgattt gggtttaata gtaagggatg 60
gcttgagtta ncaatgaatt aagggaagac tantgttaaa acaaaaaaaaa accaaaaaacc 120
acattcaacg aattgaagat actcaagaaa acctgcagaa aataatatga aaattaaggg 180
gaaacctgan tgtgttttaa ggcanatta aataaagctt atgttttatg gttganana 240
tcagactaat aaacaggctg tttcanacct aagttaggca ctt 284

<210> 9146

<211> 352

<212> DNA

<213> Homo sapiens

<400> 9146

cttttttttt tttgtctttt aaaaacatcg taacattaac acatggccgt tcaccgtccc 60
ccagcgatgg gagctggcct ggggccagg gtcctccagg atcttcactc attcacagta 120
acggttctga ccagtcctcc aggtcgcacg tggatgccac aggggtgggg aaggaagaag 180
aaattactnt cccaccttca naaaaaaaaa aaaaacaaac aaacaaacnc tgctanccac 240
tcacctttaa aaaccccatg gctatgggcg cctgcancgg gcgggggtcc atttgcttgt 300
tcttnatac aaaaangcag aaaatcccc cttaccaaac attnnaaatc ct 352

<210> 9147

<211> 221

<212> DNA

<213> Homo sapiens

<400> 9147

gtttgttagt tancctggcc tcanatcagt cctctatct ctggtctaatt gttgtaactt 60
ctttttctct tgggtatntt aggccatgta tntggaaatt ngatgcatgt gaccccctat 120
ggcacagtct gacatttctc aaattcacct canttccat ctctggttct ggaaattatg 180
aantcagana gccccatgaa ggcttaagtn tacnggcac a 221

<210> 9148

<211> 455

<212> DNA

<213> Homo sapiens

<400> 9148

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ggaanaaaac atttgcaa attttatctg atgagggttt aatatccaga aaatataaag   60
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ataaatatatt tcccaaaatg acataaaaat ggtcaataag catgtgaaag gattctcaac  180
atcattaatc attagggaaa tgcaaatcaa aaccaaactg aaatactgct ttacacctcc  240
tatgatcagt ataattttta aaaacagaaa aataaaagca ttggtgagaa tatggataaa  300
ctggaaccct actggaaatg tataattgtg cagtcattgt ggaaagggtt ggcagttcct  360
cnaaaagcta aatanaatta ccatatgttc ttggccttcc tccncctana taataactccc  420
agaaaaaaa aaaaaagggt tttnaacaaa aactt                                455

```

<210> 9149

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9149

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aacaatgtaa atgattta atgtcacctga gtggtgtatt tgaggagtac aggtttcctt   60
gtaggatttt tttttaaggc atccattgag aaaaaagaaa tgaacactat cagagaagaa  120
tcctgatgga gatactgttt tgggctagag gtattgaaga ccccttaaga taaaaaatgc  180
atgacttggc tcttcctca gagagctcat actaggtgtt caattcacat tggtttctga  240
atggcttgaa aacaatgata tccattctca gagggctgag actggatcta gaattggcac  300
ttcaatgctt ggcagtactt ttgatcttct aatatgccct cttgttttcc anaacaatat  360
tgacaacgat aattcattga aaatttacnt cn                                392

```

<210> 9150

<211> 327

<212> DNA

<213> Homo sapiens

<400> 9150

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aangtgtaga gatgcattct cactatgttg cccaggctgg tcttgaactc ctgggnctca   60
agtgatcctc ccgtctttac ctccaangg gttgggatta cagggtgag ccactgcacc  120
cagtcccatt ttacttaa atcaaattca aatcttcagt gtntactta ttttggtgt   180
taattccatt atacaccgtc ttatttcatt aatttcata ttgtgccaga caagatataa  240
aaataattca actccagnca ataatnccat ctgtcttcat gtgaccagaa taannagctt  300
ctgctcccaa natggaagcc acagtaa                                     327
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<210> 9151

<211> 446

<212> DNA

<213> Homo sapiens

<400> 9151

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gtgaaagggt gttgaatttt gttaaatact tttcctgtgc ctaatgaagt gatcttgtaa   60
attgtaattt aatcttatct attctcatgt ccaaacactc aaganaaaac tataaggaac  120
tatatttaca aaataaatca taactttaca aaaagggc ataaaatagcat tttggcaaaa  180
acttaactta ggtaatctga aggtatctaa ctgtatcaat tttaaaaata taaaaatata  240
gctttatgac gaaatTTTTT ctgattaaaa aagtaaaact tcatttgctg gttataanac  300
aatatgttca tttanaaaaa aagtggacat cctgggctaa catggtgaaa cccgtctct  360
actgaaaaat acaaaaaatt tanccnggcg tngtggcggg tgcctgtatc ccacctactt  420
gggaagctna agcaggaaaa ttgcnt                                     446
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<210> 9152

<211> 406

<212> DNA

<213> Homo sapiens

<400> 9152

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aattgcacat ctgttcacag aggttggcaa aagacactgg aagtgattgt gaaatccaca 60
ttgtgattcc tcaggaatca gatacctagaa gggggtgccc agagctgtcg gcacaccgtc 120
ccaggagtct gcctgtgcag ctcccagcca ggcaagaagc cctgaaggca gagtcccagg 180
tggacacagc tggacgcctc tctgacaatg gtggctctgg tggtaaccc ctcggtgtct 240
cttctgcacc tctcaaggct gcaaagtgcc aaatactctt ttccaaccag ctcccgatt 300
ccccctcca tctgggactg catgtcctgc ttancgattt caagcaatga tttcaccttt 360
tcatanacaa ggacattgtc ctcatcaggg cttgcacat cncctt 406
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<210> 9153

<211> 550

<212> DNA

<213> Homo sapiens

<400> 9153

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gtatagcttt caggaagcag gaagactttt ctctttttta atgatagaac ataaatactg 60
aaacaatgac attggaacat ctatccattc ttgtttcggt ggaaagtcta tctaattcag 120
cttctggacc gactgttcgt ttttccatga tctcttcctg caggtttgct agaagtcct 180
ttcccccat aaacaccttc ctttgggana tttgggtgcc ttcctttttt aaggttttaa 240
aaactaaaat gatttataga ctatccgtat cctgtcanag ttgggcaagt gaatggatca 300
tatttgcgtg ggtaactctg attataggac ttcactgttt cttgaactaa aagtgaaga 360
tttattattc tattaatgct cataaagtca ctcttttgat gagccataac ttctctttat 420
gaagantgtg tatgccagtc acctatgata agganaaaa aatccanact tctaacatat 480
tccctcacat tccctgcaac attaacagtc ttgaaaccct atntaatccc agggganaat 540
```

gccccnggat

550

<210> 9154

<211> 401

<212> DNA

<213> Homo sapiens

<400> 9154

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cagcacaata tttcatttat ttattgtata agtttggcaa acagcacaaa aatccagcaa 60
catttaaaac atataaaaaa gtcaaagtct aaacaggact agggattttt ttttacatca 120
ttagaaataa cgagtacaca ttttaagatt ctgcaaagct agcaaaatga anatgcttgc 180
cttctgaaca tatactacaa acacacatac aaaaaaacia tataatttat ctttacaaaa 240
attacagcca agcaatagaa aagaaggatg ttinatgatga agatagcaac acatatgttt 300
agtacatata tcttacacat tgaaatgcta catcttatac cctgaaatgc catgtgtnta 360
gagccnngca nagtaaattt aggctcntta ctggaggtta a 401
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<210> 9155

<211> 581

<212> DNA

<213> Homo sapiens

<400> 9155

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ctagcaaagt gggtttattct ttcaacttat tgctggaaga agtcctttta acaaaccagt 60
gcanagaaaa tgcctatcaa aagtatcagt ttttcagctt tcttcaccac tgcttttagat 120
gtatcatttt tataatttta tctcttcatt tttttaaaga gctgctactt cagatgacag 180
taactctttg gtgtttattt ttatttccaa gattgtgatt tttttaagag gctactttta 240
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caagcgctct agaatgtgat gagacctcag ttctctctct tccaaaaatc tggtagctat 360
tgaaccaagg ggagatacag gcaaggaaca ctcatgtnaa cccaattcca atttcatcac 420
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catttcagaa agatgacgan tttctaattt gagtgaccca gctgatccaa aatctcctta 480
 tgctctactg ctttgtcttc tgccttttgc tctctgctct gaatcccttt cctntntga 540
 agaaaaacct ttggtggaan ccatattgan atcccccca n 581

<210> 9156

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9156

ctcattgtga aagattttct ntntattatc aaatctctgc tatagaaaca ctgaaaaaaaa 60
 tgggaaaaaaaa aatcactggg anangcagca taaaatgggtg gctgaaaaca anaactctgg 120
 gagccaatct cagctctact cccttactag ttgtgccccn taggtaggat ccttcaacat 180
 ctctgcttca actnagccat ttgtaaaact ggggtaacag tacctatctc agagtaaagg 240
 ggactaaaca agttaacact tggaaagcat ttaaaanaaa gccagcaca taagtgttat 300
 atgtatttgt aaaacttttt aaaaatctca actgggttaa cttttccatg gatctttcag 360
 gtccttaccc atatacattt ttttanatgt gttacantaa gtatgtatat acaantctgt 420
 anccttttta ttccn 435

<210> 9157

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9157

aagatggagt ttcgctcttg ttgcccagggt tggagtgcaa tggcgcgac tttgcttact 60
 gcaacctctg ccttgcagtt caagcaattc tactgcctca gcctctcaag tagctgggac 120
 tatagacatt caccaccaca ccagctaatt tttttgtatt tttagaaaat tttgtatatt 180
 tanaaaagggt ttcacatgt tggccaggct ggtcttgcac tcctgacctc aggtgatccg 240

cccacctcag cctcccaaan tgctgggatt acaggcctga nccactgtgc ccancctca 300
 agtnactctt aaacctactg aagttagaca atcaataact gaaatgacat catctttctt 360
 gaatgtttaa ggaaataaaa ttccttcttc tgacaaactt taaatgtgtt cttganttcc 420
 ttgcctcccn cttcctctgg gaattttctt ccctanctgc tcnctttcat tatcaanaaa 480
 atattccctt cccccctttt accttatacc ta 512

<210> 9158

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9158

cataggtaaa atttttatit atgaatgtgt ggacacatga ctttggatcc agccagccag 60
 tgacataaat aaacttgagc aaaagtttca agctaganga tatatatgta tagaaaatta 120
 tatatttgtg tgtgtgtgta aggctcttg gaacagtgcc acaaacctgg acaccaacca 180
 acanaatcct cccgtccttt gaaatttcca ttaanagcac aatgggggta attataccag 240
 gatgctcaa tcgtcttttc catcttgtgc actcacatgc ccgccaacaa tgaaatgttc 300
 gcctgctccc ttccaatgtg atggttggtg aacttatctt tagtgtcatt tgataagcct 360
 ttgtgctcac anaananaca tcccactgac ccagccactg gtcattgtct ataccagttc 420
 acatcaaagc aggcgctttt gtcaggttcc nctcnaatat ccattccc 468

<210> 9159

<211> 223

<212> DNA

<213> Homo sapiens

<400> 9159

ggtaactgct tctttactac ttgatgtna aaaagtgtta gcttgctacc taaagtaagn 60
 tttttggcta atcagcaaan tccatttcca aggncttcaa gtatgatctg gccaacacca 120

cagaagatga aaagcagaat cccacggttt tgganttggg gcancggaaa ctacatgaac 180
tcggantcag gangtccagg gtctancact catctactcc tga 223

<210> 9160

<211> 330

<212> DNA

<213> Homo sapiens

<400> 9160

gttttctact gaaacttatt atttgccatt aagaattgca aactatacta ctaagaatga 60
acaacattct cttcattaag cctttttcaa aacacacgan acaaagctcc ccttttggtca 120
agggtgtccca cacattacca ctgcagctcc cagcacagcg gcgcaccatg aactcggacg 180
tggagcccaa ggaatggaga tcgcaccagc cttccctgct tccccacccc aactacaccc 240
naggggagaaa ggatacnang aaatacccta tgtcttcaat gcttgggggg ctgggggtgt 300
cctctgctac caantgggcc ggtcantgcc 330

<210> 9161

<211> 517

<212> DNA

<213> Homo sapiens

<400> 9161

gaagtccaac ctggccatcg ctttatattt ctgcataaga naagcacagt tganatgctg 60
gcttctggct tcatactgt gctaaagcaa ggcttctttt ttccttatgt tacttttttg 120
agacaaggct tcactctgtg acccaggatg gagtgtggcc acacaatcat agctcactgc 180
aaccttgatt tccaagctc aagtaatcgt cctgcctcag cctccccgagt anctgggatt 240
acaggcgcac accaccaggc ctgactcttt ttttttccct ccggtanana tggggctctcc 300
ccatgttgct canactggtt tcaaactcct gagctcaatg atcttcctgc ctcggcctcc 360
caaagtgctg ggatttcagg tgtgagccac catccccgga acttttcttt tcaaaacata 420

cattaaaatg gaaatgaata ngaacancca gtggctgtga tgcacaaaaa cccctgtctg 480
gaaacatgcg tctangttat cttcccnct ttgccan 517

<210> 9162

<211> 599

<212> DNA

<213> Homo sapiens

<400> 9162

aagattttat gtaatgttta ttttttaat tcccatccta actttggctt taatccttac 60
ctctcatttc cattcttttc ttgaaatcc aattaaaaaa aaaaaaaaaa aaacaaagt 120
tttaaaatca caattatcta aagtcataat aaaatttnc tgtctccaaa nagggggaaa 180
acacaccact tttattttta tgcagcattt tcaaataatgc atgtcaatat atattttata 240
aactatttta aataaaaacc ctncatcctt tgagggttatt gacattttct agttcactga 300
cacatctccc ataatacaat agttctattc attttcatga atgaggtggg aactacacta 360
aaaagtagga ttttaatccc tgaggtgcca gttaaaatgg gacnangttg cccttgcaac 420
acaanatttt aaaaatcagc cttaaataat aagcatggat catgctattt gaatcaaaat 480
ccctcccata gcatgaaatc ctttaggaaa tggcatttat tgggttaatt caccngctat 540
tcccaccenc agctataaga tcttcctttg gcnaggaata cccaaccag gaattttct 599

<210> 9163

<211> 480

<212> DNA

<213> Homo sapiens

<400> 9163

aagatggagt ctcactctgt caccaggct gaagtgcagt ggcatgatct ctgctcactg 60
caacctctgc ctctgggtt caagcgattc tcctgcctca gcccccgag tagctgggat 120
tacaggcacg tgccaccatg cccggctaatt ttttttgtat ttttagtaaa gatgggggtct 180

caccatattg gtcaggctgg tcttgaactc ctgacctcgt gatctgcccc cctcagcctc 240
 ccaaagtgct gggattatan gcataancn nccatgcctg gcctaaaaaa ctttgttttc 300
 tngaccatac ttatcatggc tccttgata caaaaaaatc ttgggtcag ttaaactttt 360
 atggtctttt atgttaccaa gtactgaaac tgggtgaaca cnagccacaa attcctgaat 420
 nctgttcctt ggtgataatg gaanccaaaa atctccaaaa atcnttttta naaattgcta 480

<210> 9164

<211> 204

<212> DNA

<213> Homo sapiens

<400> 9164

catattggtt gttttgtggt ggtaattgag ctgggaaaaa ttcaaaattg ggtcataatt 60
 aatggtaact aaacanattt gtgaatatgg gacatctgtg gtcttgaaaa catcagtatg 120
 atttgtcccc atatttcttc ancctggaca ataaaaacan acaggggagg ggggtaaagt 180
 gcantaaant acgttgagtg atnt 204

<210> 9165

<211> 376

<212> DNA

<213> Homo sapiens

<400> 9165

cacgttttat agtcctttta ttgaaattc agtgtaaadc actcttaaac tataaattca 60
 cagttgttgg aggttttttt ttactttaaa tgatgtgaaa gcatttggtc cattcaaagg 120
 cccctatgcc ttgaaatgac atattctcag taacttcttt gccagtaact anagtatgtg 180
 agactgagta actataatgt gcataattca anaattagct tcccgtgca ttataacaca 240
 tttcctagga aagcctttgt atttttcata gccttttcac atatccctca tttanaant 300
 cacagtgttg cagttttact ttgtttcana ngggaaggcc atcttggttg cataaggggg 360

acanaaaata taatat

376

<210> 9166

<211> 356

<212> DNA

<213> Homo sapiens

<400> 9166

gtanatgatg ggggtcttacc atattgccca tgctgggtgtc aaactcctgg gctcaagcaa 60
tcctcccacc tcagcgctccc gagtagctgg gaccacaggc acccaccacc atgccacact 120
aaaatttttt ttttgggggg ganggtaaaa aangggctctt accatgttgc ccaggctggg 180
gtcaaactcc tgggctcaag cgatcctccc acctcagcct cccgacatgt aaacgggtggc 240
tacatttccg cacaatcccc gcgggtctccc tcattctgtt ttacaactac tcccacataa 300
agtaacgtan aanacaanc cccgttattc ccttanaaag tagactggan cttgca 356

<210> 9167

<211> 473

<212> DNA

<213> Homo sapiens

<400> 9167

acattagtat ttacatttat ttaacgtatg cagttttacac actcattatt aaacaaaatt 60
gggaatgcaa acaaataatc aaataccata agcattatca aataaaataa ctggcactag 120
tggtataagc atattaatgg acctgggtaa ggaaaagtga tggaagaaga ctgcagccca 180
tggcattttt ctttttacca aaagaaaacg ctcagtagca ccataatggg aatacttaaa 240
agaaatacat aagatagaac attttaactg ctatcattga ggtaacctg cttttattta 300
agtgaattat acaggaaatt aacagtacag gcagtatttt ggccaacttc tgcttatgtc 360
agctgancat tgtccataaa caaaagcnaa agaaaataat gctaatacata catggaactt 420
ttgttcttgg gtacaattcn gccccctgcc ttgaattcct nggntggnaa aaa 473

<210> 9168

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9168

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aaatagacag ggtcttgctc tgttgcccag actggagtgc aatggtggaa tcatagctca   60
ctgcagcctc aaactcctgg gctcaaatga tgcttcacac tctgcctccc aaagtgttgg  120
gattacaggc gtgagccacc acacgtatcc ggatccagtg cggttttaat gtancataag  180
agttgaacac tgattaaaac ctttttcata ctcataata atcaacagca ttcattagat  240
ttttttctgg tacagtgtct ctggtactga atagagttgg tgtacacact aaaggttttc  300
tcacattcat cacattttga ctgtcttctc cacaatggac ttcctcatga atagtaagtt  360
caganagttg gctacaactt ctgctgcact gaacacactg gtagggttnc tcctcancat  420
gggttttctg gtgttcaata anacantac at                                     452

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<210> 9169

<211> 439

<212> DNA

<213> Homo sapiens

<400> 9169

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aaaatgggga aggtttatta aggtttttcc tcaagaggaa cagccaatct cttgcttctt   60
gagagaagca attaattgga aatgtntgtc acaccttggg ccagaacca caggaggccg  120
cttctcagca tgcccaacga acatacatca tccccaattc ccatttaaag ctcattaatg  180
tctacaaaac agaatccacg ttgccttccc agaaaacaga actaggaacc cagtcaaagc  240
ctccagctgt tctcaacaag aatattttaag caagacaggg caataaatgg actgcacatt  300
caacaaaccc atgatgaaac tgcagtaaaa tccaggatca aagaaatgtc tggactacat  360
tttcaagaat aacttacagt ttttacattt tggggaacat aaatactaaa aactgggttn  420

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ttagaacgcc tcaaancctc

439

<210> 9170

<211> 513

<212> DNA

<213> Homo sapiens

<400> 9170

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aacctctgcc tcccagggtc aagcaattct cctgcctcag cctcccaagt agctgggatt 120
acagggggccc gccaccatgc ccgactaatt tttgtatitt tagtaaanac ggggtttcac 180
catggctggt ctggaactcc tgacctcgtg atccaccgc ctcggcctcc caaagtgtg 240
ggattacagg catganccac tgcgcccggc cactaatcca tattacaaa ttaaagcctc 300
naaattaacg ttttatctca attatagtca ttctgttgca aggaactttt aanaacaatg 360
ttggttacca atgtnacca ataatgcaa cttagttta aattaccaa gtggttacca 420
actgataact taaattaagg ctgaagtna ccgaaaaaat aaaaattaat tcnctcct 480
aaaccggtnt ttaaaattcc naagccacc aaa 513

<210> 9171

<211> 497

<212> DNA

<213> Homo sapiens

<400> 9171

acagttaaag aaaaagggtg ttatttaggc catcaactag gatcataata aataacgtaa 60
tatactaatg taataacaga tcttctcatg catttatcgt gtttataaat atagaagaaa 120
gctggcttac agggctgttg ggacaaattt ggaaaagtgt atttggcaat tacacagtaa 180
aagttaacag tggtgactat cagattctct tttctgtcag ttttagaat acatccccta 240
tacatctgtg aataaatggt aatggtctct tagagtttct actttttgtg aacatgccag 300

agttaagtaa attgtcaaag gatccaggtt gacaatgtgt tatttgtcaa tttttctaataat 360
 gaaaaacaga tcttagaaaa atgaactctt ctgcatttca ttggtanagg ctgatataatt 420
 acaagccgga atcattcaac aataaaaaaa gtcctccatg aaataaaacc cnaaaattat 480
 ttatcnataa tnacngt 497

<210> 9172

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9172

gagacagant tttgctcttg ttgcccaggc tagaatgcaa tggcatgac tcggctcatt 60
 gcaacatctg cctcctgggt tcaagcgatt ctctgcctt agcctcctga gtanctgana 120
 ctacaggcgc cgcacacaac gcctggctaa tttttgtnc ttttagtaaa natggggctt 180
 caccgtgttg gccaggctgg tctcgaactt ctgacctcag gtgatccacc cgcctcggcc 240
 tcccaaagtg ctgggattac aggcgttagc cacggcgccc ggccaagaat tttcatatga 300
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 anttgctccc agtgagacat tggctcttta ngggtttttt gtattttaa tgaactgcac 420
 aaaatgaaac ggggccttgc caaaaaatcc tgggtgcttgc tccattcncc antggggggc 480
 cgtcnctgct tttgtcttca aaaacctngg acancctatt ccccc 525

<210> 9173

<211> 425

<212> DNA

<213> Homo sapiens

<400> 9173

ggcagttgaa aaaaatatat ttatttcaat ttgttggtaaa agtttatga nanccaagtt 60
 tgcctgcaag tgaaaaaat gcagcaacga aaaacaggga acacggggca cataataata 120

ttctaanaact ttgtgccatt aagttaaaaa tatctgttca taaaaaaatt gggtttccttt 180
 tccacctccc acccccnaat tggaattttc aggcittaaa atttaagtna ttcccctggg 240
 ctgaggatat gatctcttgc cattttttct tcaactgtta cttgtgaggg tttaatttgg 300
 aaatgataac ttaatagggt tctctttgga gtgaaatttc ccattgtagg cnctaggaaa 360
 aacaaggcaa aanctgcant tagcgtctca ttttcccatt tnaaaactct ctggggccct 420
 nacct 425

<210> 9174

<211> 533

<212> DNA

<213> Homo sapiens

<400> 9174

gcaaaaaaaaa tcttttattg gcatgaaaat aatgttgtaa atggcaccaa atattccact 60
 taaatgcata tacagtatta nagtcaaaaa ctattttatc cctctttgct gtttttcccc 120
 cttctgcca ctttcctggg tgttgggggg gcccgctgac aacagtcaca aatccagcga 180
 cctgatggaa tagcaccaag gccacacaa aaagtatgat aacctctgtc acacatatca 240
 canaacatca tttcttcttc atggtggggg tgtccacata taatgcatgt ttacattcc 300
 atacactgcc atgggtaggt cttaatcata aaaacaagct ccattgtcat atccaggcaa 360
 gaaagatggc cactattctc acattgggan cagtgtataa gtgattcacc tttcctttct 420
 tgttggantc cttaccttca aanaaattcc acatatacat ttggaatgaa ctttggcttg 480
 ttaccaagaa ntganttga aaattccaaa ctttgggaac actttcttng aat 533

<210> 9175

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9175

atattttcat ttttcatcct aatttactga agccattttc tttggttagc tttagaatta 60
 tctttcttta tactaaccag cttagcatgt aataattctt gcccatgtga ctacaaaaca 120
 ttagatatct ccacaaataa aaacganatt cacctacaca aatattcctt ctctttaagt 180
 tcacaaaatg caagaagaaa agaaaaatga tgtttaggttg tcagtaagga aagcatttct 240
 agatgagaaa aagaaactta agtggttattt cccccctaca gttttgaana cccggctgaa 300
 cacagcataa aaattgtcag gaacagtgcg ttctctttac antatgaagt gaactaaggg 360
 gttgggttgg ttcaattctg gcancccat ccanaaaaaa aaccctccaa nttgacagt 420
 ccttttgtcc gtttangggg tggcaacacc tncctc 456

<210> 9176

<211> 382

<212> DNA

<213> Homo sapiens

<400> 9176

gagacttaac tggtttaatt gcttagccct ggtgcctcag ccacctctca tctgtagggt 60
 gagactcaag tccaggcacc aagacacacc agcaccceca acaccatgcg gggatcattg 120
 gcctgaaact tggccanaaa aagctccagt cctgggcctg taaaaatggg cgctgggant 180
 gtctgaagcc ggcacggtgt cccctgcgtt gtcggccctt gcaggtgaag tgtgtgtcnt 240
 tccccactt tccccgaat ggcaccacg gcctcctgct gganccctc ccgggcccc 300
 ctcagggaac aaaactctgc ntntgttcaa ngttcaacct ggccacctgg aactccanct 360
 caccctgggg gtgtggatgg at 382

<210> 9177

<211> 473

<212> DNA

<213> Homo sapiens

<400> 9177

gaaaatttat ttcacattta ttactagtca cataatcctc aaaaatctaa gttcacaaat 60
 gatcatcaca tgnagccctc ttctccatat acacatttgt tagtgtgaaa aaacaatttt 120
 gtacagtatt ttagtagtta catgattagc aagcaacaga gaagtagtga aagctgaaga 180
 actccaaatg cattgctcat aggacaacca ctcaaacaca agcagctagg caataaagga 240
 aaatttccca tccagtcatt gagaaatgct aaaggcattt tatggtgaca tgaatgctta 300
 anttagtatg caacctatag ggcaaataaa actgctatat aggtnggtaa ttttgcattt 360
 aaatatttgt tagtatggta ctaccattt atctaacatt taataatata taaaatttta 420
 attctgggtt ctcaaaacan ttgcttggtg ttinggtana ntntctgtta tac 473

<210> 9178

<211> 354

<212> DNA

<213> Homo sapiens

<400> 9178

aatgacaaga attgcacagt ttattatttt gagacaattg ttgcagacat aaatatttaa 60
 aattttctaa gcaaggtgct tttacaaaa tttttaaggt tggaaagagc tgataacttg 120
 gatcatagct cacacagaat tccaaattaa agtggactcc attatctccc tatattttgc 180
 aaacaatgct ttgtataaca cttctttaaa aactataaag agacagcaag ctgaaacttt 240
 tttcaaagca cacaagaaat gtttacttga aaaangtgct gaggggagaa gggagtgaaa 300
 aatcctttta ctatttccca ctacaggaca gccnctnnca gactangaac aagg 354

<210> 9179

<211> 242

<212> DNA

<213> Homo sapiens

<400> 9179

ctgtagcaat gaaaattttt aatttgaata aaaatcacgt aagcatgang ttgttgggga 60